Area Wage Survey

Philadelphia, Pennsylvania–New Jersey, Metropolitan Area November 1988

U.S. Department of Labor
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Introduction

The Bureau of Labor Statistics is restructuring its area wage survey program to reflect changes in the number and geographic boundaries of the Nation's metropolitan statistical areas. In place of annual studies of 70 areas, the new program, when fully implemented in 1990, will cover 32 areas on an annual basis and two groups of 29 areas in alternate years.

This is 1 of the 32 areas being surveyed each year. While occupational earnings are presented annually (A-series tables), information on establishment practices and employee benefits (B-series tables) is presented every third year, when Bureau field representatives obtain such data during personal visits to respondents.

A major consideration in the area wage survey program is the need to describe the level and movement of wages in a variety of labor markets, through the analysis of (1) the level and distribution of wages by occupation, and (2) the movement of wages by occupational category and skill level. The program develops information that may be used for many purposes, including wage and salary administration, collective bargaining, and assistance in determining plant location. Survey results also are used by the U.S. Department of Labor to make wage determinations under the Service Contract Act of 1965.

Earnings

Tables A-1 through A-6 provide estimates of straight-time weekly or hourly earnings for workers in occupations common to a variety of manufacturing and nonmanufacturing industries. Where possible, occupations with related duties (e.g., accounting clerks and payroll clerks) are clustered to facilitate comparison. The occupations are defined in appendix B. For 31 large survey areas, tables A-12 through A-17 provide similar data for establishments employing 500 workers or more.

Table A-7 provides indexes and percent changes in average hourly earnings for office clerical workers, electronic data processing workers, industrial nurses, skilled maintenance trades workers, and unskilled plant workers. Where possible, data are presented for all industries and for manufacturing and nonmanufacturing separately. Data are not presented for skilled maintenance workers in nonmanufacturing because the number of workers employed in this occupational group in nonmanufacturing is too small to warrant separate presentation. This table provides a measure of wage trends after elimination of changes in average earnings caused by employment shifts among establishments as well as turnover of establishments included in survey samples. For further details, see appendix A.

Tables A-8 through A-11 provide measures of pay relationships in establishments. These measures may differ considerably from the pay relationships of overall area averages published in tables A-1 through A-6. See appendix A for details.

Establishment practices and benefits

The B-series tables present information on minimum entrance salaries for inexperienced typists and clerks; late-shift pay provisions and practices for production and related workers in manufacturing; and data separately for production and related workers and office workers on scheduled weekly hours and days of first-shift workers; paid holidays; paid vacations; insurance, health, and retirement plan provisions; health plan participation; and other selected benefits.

Appendixes

Appendix A describes the methods and concepts used in the area wage survey program. It provides information on the scope of the area survey, the area's industrial composition in manufacturing, and labor-management agreement coverage.

Appendix B provides job descriptions used by Bureau field representatives to classify workers by occupation.

Table A-1. Weekly earnings of office workers in Philadelphia, PA-NJ, November 1988

Occupation and industry division	Number of workers	Average weekly hours[1] (standard)	Weekly earnings (in dollars)[2]			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean[3]	Median[3]	Middle range[3]	Under 180	180 and under 200	200 – 240	240 – 280	280 – 320	320 – 360	360 – 400	400 – 440	440 – 480	480 – 520	520 – 560	560 – 600	600 – 640	640 – 680	680 – 720	720 – 760	760 – 800	800 – 840	840 – 880	880 – 920	920 and over
Secretarial and keyboarding occupations																										
Secretaries	8,827	38.5	413.00	396.00	345.50– 460.00	–	–	48	240	994	1663	1568	1561	1052	658	280	338	156	117	37	31	19	1	11	58	15
Manufacturing	3,213	39.0	421.50	407.00	355.00– 466.00	–	–	–	36	342	587	568	623	363	195	90	215	78	87	14	11	4	–	–	–	–
Nonmanufacturing	5,614	38.0	408.50	387.50	338.00– 458.50	–	–	48	204	652	1076	1000	938	689	463	170	123	78	30	23	20	15	1	11	58	15
Transportation and utilities	610	39.5	564.50	481.50	468.50– 625.00	–	–	–	4	1	13	39	48	106	139	19	48	51	20	17	11	10	1	11	58	14
Secretaries I	1,583	38.5	347.00	345.50	299.50– 382.00	–	–	45	163	315	427	336	172	118	6	–	–	1	–	–	–	–	–	–	–	–
Manufacturing	783	38.5	361.00	355.00	317.00– 398.00	–	–	–	30	170	203	194	131	48	6	–	–	1	–	–	–	–	–	–	–	–
Nonmanufacturing	800	38.5	334.00	333.50	288.50– 370.50	–	–	45	133	145	224	142	41	70	–	–	–	–	–	–	–	–	–	–	–	–
Secretaries II	1,974	38.5	395.00	380.00	327.00– 426.50	–	–	3	45	347	387	384	362	93	172	17	110	54	–	–	–	–	–	–	–	–
Manufacturing	845	39.0	418.50	408.50	355.00– 439.50	–	–	–	3	94	178	132	227	27	39	10	86	49	–	–	–	–	–	–	–	–
Nonmanufacturing	1,129	38.5	377.50	369.50	319.00– 415.00	–	–	3	42	253	209	252	135	66	133	7	24	5	–	–	–	–	–	–	–	–
Transportation and utilities	190	39.5	460.50	481.50	410.00– 481.50	–	–	–	2	–	13	25	24	5	95	7	14	5	–	–	–	–	–	–	–	–
Secretaries III	3,162	38.5	418.00	400.00	348.50– 455.00	–	–	–	31	269	660	603	629	395	225	71	145	50	5	12	10	5	–	–	52	–
Manufacturing	898	39.5	431.00	420.50	382.00– 462.00	–	–	–	3	58	157	166	139	125	102	41	90	13	3	1	–	–	–	–	–	–
Nonmanufacturing	2,264	38.0	413.00	392.00	345.50– 441.50	–	–	–	28	211	503	437	490	270	123	30	55	37	2	11	10	5	–	–	52	–
Transportation and utilities	226	39.5	633.00	597.00	490.00– 759.50	–	–	–	–	–	–	12	10	21	38	8	24	34	2	11	10	4	–	–	52	–
Secretaries IV	1,540	38.5	459.00	450.00	403.00– 485.00	–	–	–	–	33	121	195	365	375	203	72	49	16	67	18	5	6	–	10	5	–
Manufacturing	521	39.5	472.00	451.00	410.00– 504.00	–	–	–	–	11	20	67	120	147	39	24	22	1	52	10	4	4	–	–	–	–
Nonmanufacturing	1,019	38.0	452.50	445.50	400.50– 481.00	–	–	–	–	22	101	128	245	228	164	48	27	15	15	8	1	2	–	10	5	–
Transportation and utilities	53	39.5	659.00	660.50	464.00– 843.00	–	–	–	–	–	–	–	2	12	2	2	2	2	9	6	–	1	–	10	5	–
Secretaries V:																										
Manufacturing	166	39.5	512.50	543.50	365.00– 653.50	–	–	–	–	9	29	9	6	16	9	15	17	14	32	3	7	–	–	–	–	–
Nonmanufacturing:																										
Transportation and utilities	57	39.5	717.00	651.50	595.00– 914.00	–	–	–	–	–	–	–	1	–	4	2	8	10	9	–	1	5	1	1	1	* 14
Stenographers	273	39.5	470.50	465.50	411.00– 535.50	–	–	–	10	9	24	19	58	67	3	18	16	4	45	–	–	–	–	–	–	–
Nonmanufacturing	242	39.5	485.00	466.00	420.00– 565.00	–	–	–	7	3	8	19	56	67	3	17	13	4	45	–	–	–	–	–	–	–
Transportation and utilities	241	39.5	486.00	466.00	420.00– 565.00	–	–	–	6	3	8	19	56	67	3	17	13	4	45	–	–	–	–	–	–	–
Stenographers I	219	39.0	426.50	429.50	393.00– 466.00	–	–	–	10	9	24	19	58	67	3	17	12	–	–	–	–	–	–	–	–	–
Nonmanufacturing	189	39.0	438.50	440.00	411.00– 466.00	–	–	–	7	3	8	19	56	67	3	17	9	–	–	–	–	–	–	–	–	–
Transportation and utilities	168	39.0	439.50	440.00	411.50– 466.00	–	–	–	6	3	8	19	56	67	3	17	9	–	–	–	–	–	–	–	–	–
Typists	1,350	38.5	298.00	278.50	231.00– 325.50	6	28	354	303	263	138	38	81	109	10	20	–	–	–	–	–	–	–	–	–	–
Manufacturing	214	39.0	332.50	312.00	273.00– 373.50	–	–	7	57	50	42	16	28	–	–	14	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	1,136	38.5	291.50	270.50	225.00– 323.50	6	28	347	246	213	96	22	53	109	10	6	–	–	–	–	–	–	–	–	–	–
Transportation and utilities	262	40.0	399.50	416.00	337.50– 461.00	–	–	20	15	21	17	11	53	109	10	6	–	–	–	–	–	–	–	–	–	–
Typists I	710	38.5	254.00	232.00	220.00– 270.50	6	28	347	186	65	34	13	15	12	4	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	103	38.5	299.00	299.50	259.00– 320.00	–	–	6	41	25	16	10	5	–	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	607	38.5	246.50	231.00	216.00– 262.00	6	28	341	145	40	18	3	10	12	4	–	–	–	–	–	–	–	–	–	–	–
Typists II	640	39.0	347.00	317.50	293.50– 412.00	–	–	7	117	198	104	25	66	97	6	20	–	–	–	–	–	–	–	–	–	–
Manufacturing	111	40.0	363.50	336.00	301.00– 426.50	–	–	1	16	25	26	6	23	–	–	14	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	529	39.0	343.50	311.00	292.00– 411.00	–	–	6	101	173	78	19	43	97	6	6	–	–	–	–	–	–	–	–	–	–
Transportation and utilities	165	40.0	445.00	461.00	412.00– 461.00	–	–	–	–	–	5	8	43	97	6	6	–	–	–	–	–	–	–	–	–	–
Word processors	800	38.0	321.50	317.00	281.50– 352.50	–	–	44	142	237	218	92	41	18	8	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	210	39.0	345.00	344.50	301.00– 379.50	–	–	10	23	27	85	28	20	11	6	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	590	37.5	313.50	307.50	278.50– 343.50	–	–	34	119	210	133	64	21	7	2	–	–	–	–	–	–	–	–	–	–	–

See footnotes at end of tables.

Table A-1. Weekly earnings of office workers in Philadelphia, PA-NJ, November 1988 —Continued

Occupation and industry division	Number of workers	Average weekly hours[1] (standard)	Weekly earnings (in dollars)[2]			Number of workers receiving straight-time weekly earnings (in dollars) of —																			
			Mean[3]	Median[3]	Middle range[3]	Under 180	180 and under 200	200 – 240	240 – 280	280 – 320	320 – 360	360 – 400	40[illegible] – 440	440 – 480	480 – 520	520 – 560	560 – 600	600 – 640	640 – 680	680 – 720	720 – 760	760 – 800	800 – 840	840 – 880	880 – 920	920 and over
Word processors I	415	38.0	297.50	290.00	265.00– 333.00	–	–	42	124	113	97	31	2	6	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	100	39.0	322.50	337.00	269.50– 354.00	–	–	10	15	14	43	10	2	6	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	315	37.5	290.00	281.50	265.00– 318.50	–	–	32	109	99	54	21	–	–	–	–	–	–	–	–	–	–	–	–	–
Word processors II	378	38.5	347.50	344.50	314.50– 375.00	–	–	2	18	120	118	61	39	12	8	–	–	–	–	–	–	–	–	–	–
Manufacturing	103	39.5	368.00	349.00	344.50– 415.50	–	–	–	8	9	39	18	18	5	6	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	275	38.0	340.00	339.50	307.00– 380.50	–	–	2	10	111	79	43	21	7	2	–	–	–	–	–	–	–	–	–	–
Key entry operators	4,571	38.5	283.00	269.50	226.50– 315.00	1	448	913	1112	1020	436	280	204	112	6	4	9	13	–	13	–	–	–	–	–	–
Manufacturing	544	39.0	323.00	293.00	262.50– 390.00	–	–	51	135	151	29	75	53	34	6	2	8	–	–	–	–	–	–	–	–	–
Nonmanufacturing	4,027	38.0	277.50	269.50	225.00– 311.00	1	448	862	977	869	407	205	151	78	–	2	1	13	–	13	–	–	–	–	–	–
Transportation and utilities	366	40.0	393.00	417.00	320.00– 446.50	–	–	3	58	23	56	9	120	88	–	2	1	13	–	13	–	–	–	–	–	–
Key entry operators I	3,409	38.0	260.50	251.00	220.00– 286.00	1	448	889	967	851	236	145	40	30	–	2	–	–	–	–	–	–	–	–	–	–
Manufacturing	352	38.5	288.50	280.00	254.00– 311.00	–	–	47	125	116	14	40	8	2	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	3,057	38.0	257.50	246.00	220.00– 282.50	1	448	842	842	535	222	105	32	28	–	2	–	–	–	–	–	–	–	–	–	–
Transportation and utilities	156	40.0	318.00	312.00	250.00– 359.00	–	–	3	58	17	40	3	15	18	–	2	–	–	–	–	–	–	–	–	–	–
Key entry operators II	1,162	39.0	348.50	327.00	290.50– 397.00	–	–	24	145	369	200	135	184	82	6	2	9	13	–	13	–	–	–	–	–	–
Manufacturing	192	39.5	386.50	394.50	319.00– 442.00	–	–	4	10	35	15	35	45	32	6	2	8	–	–	–	–	–	–	–	–	–
Nonmanufacturing	970	38.5	341.00	319.00	289.00– 367.00	–	–	20	135	334	185	100	119	50	–	–	1	13	–	13	–	–	–	–	–	–
Transportation and utilities	210	40.0	448.50	417.00	417.00– 468.50	–	–	–	–	6	16	6	105	50	–	–	1	13	–	13	–	–	–	–	–	–
Other clerical occupations																										
Accounting clerks	5,297	38.5	321.00	300.00	260.00– 363.50	30	34	544	1374	1107	805	478	248	486	122	32	6	11	5	4	4	7	–	–	–	–
Manufacturing	1,271	38.5	348.00	334.00	266.00– 400.00	–	4	45	246	250	255	139	89	127	93	19	–	4	–	–	–	–	–	–	–	–
Nonmanufacturing	4,026	38.5	312.50	292.00	254.50– 349.50	30	30	499	1128	857	550	339	159	359	29	13	6	7	5	4	4	7	–	–	–	–
Transportation and utilities	587	40.0	429.50	460.50	386.00– 468.50	–	–	38	37	25	31	21	63	309	18	12	6	7	5	4	4	7	–	–	–	–
Accounting clerks I	1,448	38.0	269.50	253.00	228.50– 288.00	28	28	415	559	200	50	65	54	47	2	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	160	38.5	277.50	275.00	245.50– 297.00	–	–	11	77	56	12	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	1,288	38.0	268.50	249.50	225.00– 283.50	28	28	404	482	144	38	63	52	47	2	–	–	–	–	–	–	–	–	–	–	–
Accounting clerks II	2,916	38.5	330.50	310.00	274.00– 368.00	2	6	102	770	753	456	219	153	394	36	19	2	4	–	–	–	–	–	–	–	–
Manufacturing	895	38.5	346.00	334.00	290.00– 396.50	–	4	34	156	170	191	120	75	107	22	12	–	4	–	–	–	–	–	–	–	–
Nonmanufacturing	2,021	38.5	323.50	299.00	270.00– 358.00	2	2	68	614	583	265	99	78	287	14	7	2	–	–	–	–	–	–	–	–	–
Transportation and utilities	346	39.5	432.50	468.50	441.00– 468.50	–	–	–	31	17	17	5	11	242	14	7	2	–	–	–	–	–	–	–	–	–
Accounting clerks III	657	38.5	378.00	343.50	319.50– 418.00	–	–	–	39	126	205	101	33	42	78	13	4	7	5	4	–	–	–	–	–	–
Manufacturing	188	39.5	410.50	434.00	338.00– 497.50	–	–	–	13	23	40	8	10	20	67	7	–	–	–	–	–	–	–	–	–	–
Payroll clerks	1,027	38.5	338.00	340.00	288.00– 374.50	1	5	34	160	220	294	138	83	60	10	12	2	3	–	5	–	–	–	–	–	–
Manufacturing	322	38.5	359.50	347.50	315.00– 400.00	–	–	4	48	47	88	48	19	53	5	6	2	2	–	–	–	–	–	–	–	–
Nonmanufacturing	705	38.5	328.00	326.50	280.00– 385.00	1	5	30	112	173	206	90	64	7	5	6	–	1	–	5	–	–	–	–	–	–
Transportation and utilities	69	39.5	399.50	380.00	304.00– 480.00	–	–	–	–	23	10	12	5	7	–	6	–	1	–	5	–	–	–	–	–	–
File clerks	1,653	38.0	226.00	220.00	203.50– 242.50	117	206	873	339	72	22	7	12	5	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	1,605	37.5	223.00	219.00	202.50– 241.00	117	206	868	329	60	19	–	1	5	–	–	–	–	–	–	–	–	–	–	–	–
File clerks I	960	37.5	211.50	210.00	193.00– 230.00	117	191	491	136	19	4	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	949	37.5	211.00	210.00	193.00– 230.00	117	191	489	131	19	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
File clerks II	659	38.5	241.00	232.00	216.00– 263.00	–	15	377	197	50	18	–	–	4	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	643	38.5	240.00	232.00	216.00– 263.00	–	15	376	193	39	16	–	–	4	–	–	–	–	–	–	–	–	–	–	–	–
Messengers	327	38.5	290.00	253.00	228.00– 357.00	2	30	77	89	36	17	19	42	4	1	10	–	–	–	–	–	–	–	–	–	–
Manufacturing	95	39.0	311.50	272.00	224.50– 357.00	–	–	35	14	10	14	5	2	4	1	10	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	232	38.5	281.00	251.50	230.00– 314.00	2	30	42	75	26	3	14	40	–	–	–	–	–	–	–	–	–	–	–	–	–

See footnotes at end of tables.

Table A-1. Weekly earnings of office workers in Philadelphia, PA-NJ, November 1988 —Continued

Occupation and industry division	Number of workers	Average weekly hours[1] (standard)	Weekly earnings (in dollars)[2]			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean[3]	Median[3]	Middle range[3]	Under 180	180 and under 200	200 – 240	240 – 280	280 – 320	320 – 360	360 – 400	400 – 440	440 – 480	480 – 520	520 – 560	560 – 600	600 – 640	640 – 680	680 – 720	720 – 760	760 – 800	800 – 840	840 – 880	880 – 920	920 and over
Order clerks	1,545	39.0	367.00	368.00	348.50– 400.00	2	15	28	86	184	433	295	338	106	29	21	7	–	1	–	–	–	–	–	–	–
Manufacturing	553	38.0	332.00	325.00	290.00– 377.00	–	10	20	73	154	122	132	21	11	–	7	3	–	–	–	–	–	–	–	–	–
Order clerks I	358	38.0	295.00	299.50	271.50– 310.00	2	15	24	68	162	66	15	1	4	–	1	–	–	–	–	–	–	–	–	–	–
Manufacturing	319	38.0	297.00	299.50	276.00– 315.00	–	10	16	63	152	66	8	1	3	–	–	–	–	–	–	–	–	–	–	–	–
Order clerks II	1,176	39.0	387.50	380.50	348.50– 407.00	–	–	4	18	22	367	280	338	99	29	13	7	–	1	–	–	–	–	–	–	–
Manufacturing	223	37.5	374.00	380.50	351.50– 390.50	–	–	4	10	2	56	124	19	5	–	–	3	–	–	–	–	–	–	–	–	–
Receptionists	93	38.0	304.00	280.50	269.50– 355.50	–	–	12	34	14	19	7	4	1	1	1	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	71	37.5	284.00	272.00	259.50– 298.00	–	–	12	34	9	13	2	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Switchboard operators	401	38.0	295.50	278.00	253.50– 315.00	1	–	43	158	101	39	36	6	2	8	2	5	–	–	–	–	–	–	–	–	–
Manufacturing	74	38.5	322.00	282.50	262.00– 359.00	–	–	1	33	9	13	7	4	2	2	–	3	–	–	–	–	–	–	–	–	–
Nonmanufacturing	327	38.0	289.50	270.00	240.50– 300.00	1	–	42	125	92	26	29	2	–	6	2	2	–	–	–	–	–	–	–	–	–
Switchboard operator-receptionists	1,200	38.5	291.50	288.00	257.00– 311.00	–	–	111	362	446	200	40	14	–	27	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	429	38.5	290.50	288.00	254.00– 309.50	–	–	38	157	133	66	17	12	–	6	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	771	38.5	292.50	288.00	257.50– 311.00	–	–	73	205	313	134	23	2	–	21	–	–	–	–	–	–	–	–	–	–	–

• Workers were distributed as follows: 10 at $920 to $960; and 4 at $960 to $1,000.
• • Workers were distributed as follows: 98 at $140 to $160; and 19 at $160 to $180.
Also see footnotes at end of tables.

Table A-2. Weekly earnings of professional and technical workers in Philadelphia, PA-NJ, November 1988

Occupation and industry division	Number of workers	Average weekly hours[1] (standard)	Weekly earnings (in dollars)[2]			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean[3]	Median[3]	Middle range[3]	200 and under 240	240 – 280	280 – 320	320 – 360	360 – 400	400 – 440	440 – 480	480 – 520	520 – 560	560 – 600	600 – 640	640 – 680	680 – 720	720 – 760	760 – 800	800 – 840	840 – 880	880 – 920	920 – 960	960 – 1040	1040 and over
Computer systems analysts	3,985	39.0	712.50	705.00	624.00– 788.00	–	–	–	–	41	45	37	149	181	296	492	468	446	583	309	256	247	110	89	160	76
Manufacturing	909	39.5	750.00	729.50	666.00– 824.00	–	–	–	–	–	–	–	–	9	33	122	148	111	163	70	49	54	58	29	43	20
Nonmanufacturing	3,076	38.5	701.50	700.00	605.00– 777.50	–	–	–	–	41	45	37	149	172	263	370	320	335	420	239	207	193	52	60	117	56
Computer systems analysts I	1,119	38.5	595.50	605.00	537.50– 635.50	–	–	–	–	36	41	16	120	133	161	338	95	78	70	18	8	1	4	–	–	–
Manufacturing	148	40.0	642.50	634.00	608.50– 670.00	–	–	–	–	–	–	–	–	3	22	56	37	21	8	1	–	–	–	–	–	–
Nonmanufacturing	971	38.5	588.00	604.00	537.50– 633.50	–	–	–	–	36	41	16	120	130	139	282	58	57	62	17	8	1	4	–	–	–
Computer systems analysts II	1,747	39.0	705.50	701.00	653.00– 749.00	–	–	–	–	1	–	21	25	48	134	139	343	277	363	220	71	30	19	8	15	33
Manufacturing	444	39.5	717.50	701.00	671.50– 758.50	–	–	–	–	–	–	–	–	6	11	58	100	76	87	41	21	21	12	2	9	–
Nonmanufacturing	1,303	38.5	701.50	701.00	649.00– 749.00	–	–	–	–	1	–	21	25	42	123	81	243	201	276	179	50	9	7	6	6	33
Transportation and utilities	108	40.0	894.00	836.00	784.00–1084.50	–	–	–	–	–	–	–	–	–	–	–	6	3	12	12	32	–	1	4	5	* 33
Computer systems analysts III	900	39.0	830.00	835.00	746.50– 883.50	–	–	–	–	–	–	–	–	–	1	15	30	90	145	55	142	181	79	63	71	28
Manufacturing	306	39.5	845.50	839.00	744.00– 926.50	–	–	–	–	–	–	–	–	–	–	8	11	14	66	28	26	31	42	27	33	20
Nonmanufacturing	594	38.5	822.00	834.00	753.50– 864.00	–	–	–	–	–	–	–	–	–	1	7	19	76	79	27	116	150	37	36	38	8
Computer programmers	4,021	38.5	547.50	534.50	453.00– 618.00	–	29	12	108	243	323	530	621	466	473	441	192	150	209	109	64	20	21	3	6	1
Manufacturing	1,070	38.5	542.00	529.00	451.00– 624.00	–	–	–	84	64	20	263	79	77	79	180	74	41	54	23	21	8	4	–	1	–
Nonmanufacturing	2,951	38.5	549.00	537.50	469.00– 609.00	–	29	12	24	179	303	267	542	389	394	261	118	109	155	86	43	14	17	3	5	1
Transportation and utilities	152	40.0	655.00	641.00	583.50– 698.00	–	–	–	–	2	1	1	9	17	20	28	28	12	2	12	10	6	6	–	–	–
Computer programmers I	854	38.5	427.00	412.50	381.00– 472.00	–	29	11	107	192	212	94	128	23	24	27	3	4	–	–	–	–	–	–	–	–
Manufacturing	240	39.0	426.00	381.00	345.50– 500.00	–	–	–	84	64	12	17	11	11	7	27	3	4	–	–	–	–	–	–	–	–
Nonmanufacturing	614	38.5	427.00	422.00	384.00– 471.00	–	29	11	23	128	200	77	117	12	17	–	–	–	–	–	–	–	–	–	–	–
Computer programmers II	1,790	38.5	514.00	509.00	457.50– 557.00	–	–	1	1	51	111	431	414	353	268	97	41	16	5	–	–	1	–	–	–	–
Manufacturing	484	38.0	505.50	462.00	451.00– 550.00	–	–	–	–	–	8	246	64	51	62	18	25	5	4	–	–	1	–	–	–	–
Nonmanufacturing	1,306	39.0	517.00	518.50	477.00– 557.00	–	–	1	1	51	103	185	350	302	206	79	16	11	1	–	–	–	–	–	–	–
Transportation and utilities	43	39.5	578.00	583.00	525.00– 616.00	–	–	–	–	–	1	–	6	11	8	8	8	3	–	–	–	–	–	–	–	–
Computer programmers III	1,224	38.5	649.00	633.50	594.00– 711.00	–	–	–	–	–	–	5	79	90	181	316	144	121	169	58	40	11	9	–	1	–
Manufacturing	317	39.0	665.00	633.50	621.00– 719.50	–	–	–	–	–	–	–	4	15	10	135	43	31	38	18	14	5	3	–	1	–
Nonmanufacturing	907	38.5	643.50	631.50	580.50– 710.00	–	–	–	–	–	–	5	75	75	171	181	101	90	131	40	26	6	6	–	–	–
Transportation and utilities	103	40.0	698.50	673.50	608.50– 787.00	–	–	–	–	–	–	–	–	6	12	18	22	9	2	12	10	6	6	–	–	–
Computer programmers IV	152	39.5	795.50	787.00	754.00– 825.50	–	–	–	–	–	–	–	–	–	–	1	4	9	35	51	24	8	11	3	5	1
Nonmanufacturing	124	39.5	802.00	788.50	754.00– 832.00	–	–	–	–	–	–	–	–	–	–	1	1	8	23	46	17	8	11	3	5	1
Computer operators	2,560	38.5	373.00	365.00	309.00– 425.00	148	206	379	457	434	379	215	146	152	18	18	5	2	3	–	–	–	–	–	–	–
Manufacturing	585	39.5	399.50	385.50	332.00– 462.50	6	49	48	136	73	101	50	34	62	12	10	2	2	–	–	–	–	–	–	–	–
Nonmanufacturing	1,975	38.5	365.00	365.00	300.00– 413.50	142	157	331	321	361	278	165	112	90	6	6	3	–	3	–	–	–	–	–	–	–
Transportation and utilities	240	40.0	450.50	454.00	400.50– 498.50	1	2	2	5	38	43	80	40	19	3	3	1	–	3	–	–	–	–	–	–	–
Computer operators I	591	39.0	294.00	286.00	244.50– 337.00	146	131	109	118	26	23	36	2	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	172	38.5	328.50	337.00	280.00– 337.50	4	35	24	78	9	17	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	419	39.0	280.00	260.00	232.50– 307.00	142	96	85	40	17	6	31	2	–	–	–	–	–	–	–	–	–	–	–	–	–
Computer operators II	1,147	38.5	364.50	355.50	317.00– 401.50	2	75	258	285	221	125	76	57	37	5	6	–	–	–	–	–	–	–	–	–	–
Manufacturing	242	39.5	391.50	376.50	329.00– 460.00	2	14	22	56	47	40	18	22	14	4	3	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	905	38.0	357.50	345.50	306.00– 399.00	–	61	236	229	174	85	58	35	23	1	3	–	–	–	–	–	–	–	–	–	–
Transportation and utilities	89	40.0	450.50	460.50	398.50– 498.50	–	–	–	4	25	–	37	18	1	1	3	–	–	–	–	–	–	–	–	–	–
Computer operators III	759	38.5	434.00	414.50	386.50– 473.00	–	–	12	54	186	229	93	75	88	5	7	5	2	3	–	–	–	–	–	–	–
Manufacturing	140	39.5	470.00	447.50	419.50– 528.50	–	–	2	2	16	44	27	9	29	2	5	2	2	–	–	–	–	–	–	–	–
Nonmanufacturing	619	38.5	426.00	409.00	377.50– 462.00	–	–	10	52	170	185	66	66	59	3	2	3	–	3	–	–	–	–	–	–	–
Transportation and utilities	94	40.0	472.50	468.00	400.50– 524.50	–	–	–	–	–	38	12	20	18	2	–	1	–	3	–	–	–	–	–	–	–
Computer operators IV	63	37.5	517.00	525.00	486.50– 549.00	–	–	–	–	1	2	10	12	27	8	3	–	–	–	–	–	–	–	–	–	–

See footnotes at end of tables.

Table A-2. Weekly earnings of professional and technical workers in Philadelphia, PA-NJ, November 1988 —Continued

Occupation and industry division	Number of workers	Average weekly hours[1] (standard)	Weekly earnings (in dollars)[2]			Number of workers receiving straight-time weekly earnings (in dollars) of —																						
			Mean[2]	Median[2]	Middle range[2]	200 and under 240	240 – 280	280 – 320	320 – 360	360 – 400	400 – 440	440 – 480	480 – 520	520 – 560	560 – 600	600 – 640	640 – 680	680 – 720	720 – 760	760 – 800	800 – 840	840 – 880	880 – 920	920 – 960	960 – 1040	1040 and over
Peripheral equipment operators	136	38.5	330.50	331.50	292.00– 378.50	9	21	36	31	21	15	–	–	–	–	3	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	136	38.5	330.50	331.50	292.00– 378.50	9	21	36	31	21	15	–	–	–	–	3	–	–	–	–	–	–	–	–	–	–
Computer data librarians	129	38.5	365.50	325.00	314.00– 428.50	2	4	54	19	15	5	24	3	–	1	1	1	–	–	–	–	–	–	–	–	–
Nonmanufacturing	116	38.5	363.00	320.00	314.00– 436.00	2	4	51	15	13	4	24	1	–	–	1	1	–	–	–	–	–	–	–	–	–
Drafters	1,516	39.5	481.50	480.00	360.00– 600.00	22	69	82	183	150	119	108	200	82	106	168	89	39	78	3	4	4	5	–	2	–
Manufacturing	769	39.5	509.00	495.50	397.50– 632.50	3	9	25	89	89	69	84	80	64	57	88	49	32	84	2	–	2	3	–	–	–
Nonmanufacturing: Transportation and utilities	34	40.0	566.50	578.00	500.50– 646.50	–	–	–	2	2	–	3	3	2	7	3	9	3	–	–	–	–	–	–	–	–
Drafters II: Manufacturing	50	39.5	381.50	381.50	357.00– 441.50	–	6	4	13	7	1	19	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Drafters III: Manufacturing	214	39.0	395.00	370.00	336.00– 442.50	–	–	9	76	43	29	28	16	13	–	–	–	–	–	–	–	–	–	–	–	–
Drafters IV: Manufacturing	234	39.5	513.00	505.00	454.00– 566.50	–	–	–	–	19	36	26	54	30	37	9	11	6	1	–	–	2	3	–	–	–
Drafters V: Manufacturing	247	40.0	643.50	654.00	604.50– 721.50	–	–	–	–	–	3	11	10	21	14	59	38	26	63	2	–	–	–	–	–	–
Electronics technicians	3,517	40.0	583.00	614.50	515.50– 667.50	–	1	78	96	131	224	97	260	71	132	1135	1292	–	–	–	–	–	–	–	–	–
Manufacturing	846	40.0	466.50	482.00	368.00– 531.50	–	–	65	79	123	55	94	203	52	128	13	34	–	–	–	–	–	–	–	–	–
Nonmanufacturing	2,671	40.0	620.00	614.50	614.50– 667.50	–	1	13	17	8	169	3	57	19	4	1122	1258	–	–	–	–	–	–	–	–	–
Electronics technicians I	284	40.0	385.00	420.00	320.50– 422.50	–	1	66	19	15	175	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Electronics technicians II	2,587	40.0	608.00	614.50	614.50– 667.50	–	–	12	65	112	44	28	72	23	50	1125	1051	–	–	–	–	–	–	–	–	–
Manufacturing	324	40.0	442.00	399.50	380.00– 514.50	–	–	–	54	109	43	26	15	9	46	3	19	–	–	–	–	–	–	–	–	–
Nonmanufacturing	2,263	40.0	632.00	614.50	614.50– 667.50	–	–	12	11	3	1	2	57	19	4	1122	1032	–	–	–	–	–	–	–	–	–
Electronics technicians III	622	40.0	577.50	574.00	506.00– 664.50	–	–	–	–	–	1	57	188	43	82	10	241	–	–	–	–	–	–	–	–	–
Manufacturing	395	40.0	528.50	506.00	492.00– 572.00	–	–	–	–	–	1	56	188	43	82	10	15	–	–	–	–	–	–	–	–	–
Registered industrial nurses	206	38.5	513.50	493.50	469.00– 547.00	–	–	–	1	15	3	69	47	33	12	7	6	7	3	3	–	–	–	–	–	–
Manufacturing	156	38.5	511.50	480.00	469.00– 542.50	–	–	–	–	7	1	67	30	21	12	5	5	6	2	–	–	–	–	–	–	–
Nonmanufacturing	50	38.5	519.50	494.00	479.00– 558.00	–	–	–	1	8	2	2	17	12	–	2	1	1	1	3	–	–	–	–	–	–

[1] Workers were distributed as follows: 32 at $1,040 to $1,120; and 1 at $1,120 to $1,200.

Also see footnotes at end of tables.

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Philadelphia, PA-NJ, November 1988

Sex,[4] occupation, and industry division	Number of workers	Average (mean[2])	
		Weekly hours[1] (standard)	Weekly earnings (in dollars)[3]
Office occupations - men			
Typists:			
Nonmanufacturing:			
Transportation and utilities	30	39.5	437.50
Typists II:			
Nonmanufacturing:			
Transportation and utilities	25	39.5	443.00
Key entry operators:			
Key entry operators I:			
Manufacturing	71	38.0	286.00
Accounting clerks:			
Manufacturing	135	37.5	402.50
Nonmanufacturing:			
Transportation and utilities	141	40.0	462.50
Accounting clerks II:			
Manufacturing	104	37.5	408.50
File clerks	140	37.5	237.50
Nonmanufacturing	132	37.5	227.50
File clerks II	90	38.0	225.00
Nonmanufacturing	90	38.0	225.00
Office occupations - women			
Secretaries	8,727	38.5	413.50
Manufacturing	3,211	39.0	421.50
Nonmanufacturing	5,516	38.0	408.50
Transportation and utilities	599	39.5	566.00
Secretaries I	1,582	38.5	347.00
Manufacturing	783	38.5	361.00
Nonmanufacturing	799	38.5	334.00
Secretaries II	1,962	38.5	395.00
Manufacturing	844	39.0	418.50
Nonmanufacturing	1,118	38.5	377.00
Transportation and utilities	181	39.5	459.50
Secretaries III	3,112	38.5	419.50
Manufacturing	897	39.5	431.00
Nonmanufacturing	2,215	38.0	414.50
Transportation and utilities	225	39.5	634.00
Secretaries IV	1,534	38.5	459.50
Manufacturing	521	39.5	472.00
Nonmanufacturing	1,013	38.0	452.50
Transportation and utilities	53	39.5	659.00
Secretaries V:			
Manufacturing	166	39.5	512.50
Nonmanufacturing:			
Transportation and utilities	56	39.5	718.00
Stenographers	261	39.5	472.00
Nonmanufacturing	230	39.5	487.50
Transportation and utilities	229	39.5	488.50
Stenographers I	207	39.0	425.50
Nonmanufacturing	177	39.0	438.00
Transportation and utilities	176	39.0	439.50
Typists	1,256	38.5	298.00
Manufacturing	211	39.0	330.00
Nonmanufacturing	1,045	38.5	291.50
Transportation and utilities	232	40.0	394.50
Typists I	644	38.5	255.50
Manufacturing	103	38.5	299.00
Nonmanufacturing	541	38.5	247.50
Typists II	612	39.0	342.00
Manufacturing	108	40.0	359.50
Nonmanufacturing	504	39.0	338.50
Transportation and utilities	140	40.0	445.00
Word processors	744	38.0	321.00
Manufacturing	182	39.0	346.00
Nonmanufacturing	562	37.5	313.00
Word processors I	380	38.0	295.00
Manufacturing	86	38.5	321.50
Nonmanufacturing	294	37.5	287.50
Word processors II	364	38.5	348.00
Manufacturing	96	39.5	367.50
Nonmanufacturing	268	38.0	341.00
Key entry operators	3,744	38.5	284.00
Manufacturing	445	39.0	326.00
Nonmanufacturing	3,299	38.0	278.00
Transportation and utilities	335	40.0	387.00
Key entry operators I	2,708	38.0	258.50
Manufacturing	279	38.5	288.00
Nonmanufacturing	2,429	38.0	255.50
Transportation and utilities	147	40.0	310.50
Key entry operators II	1,036	39.0	349.50
Manufacturing	166	39.5	391.00
Nonmanufacturing	870	38.5	342.00
Transportation and utilities	188	40.0	447.50
Accounting clerks	4,551	38.5	317.00
Manufacturing	1,136	38.5	341.00
Nonmanufacturing	3,415	38.5	309.00
Transportation and utilities	446	40.0	419.50
Accounting clerks I	1,181	38.0	261.50
Manufacturing	150	39.0	277.00
Nonmanufacturing	1,031	38.0	259.50
Accounting clerks II	2,533	38.5	325.50
Manufacturing	791	38.5	330.00
Nonmanufacturing	1,742	38.5	320.00
Transportation and utilities	276	39.5	427.50
Accounting clerks III	580	38.5	377.50
Manufacturing	168	39.5	409.00
Payroll clerks	937	38.5	337.50
Manufacturing	309	38.5	354.00
Nonmanufacturing	628	38.5	329.50
Transportation and utilities	55	40.0	374.50
File clerks	1,513	38.0	225.00
Nonmanufacturing	1,473	37.5	222.50
File clerks I	920	37.5	211.00
Nonmanufacturing	909	37.5	210.00
File clerks II	569	38.5	243.50
Nonmanufacturing	553	38.5	242.50
Order clerks	1,302	38.5	368.00
Manufacturing	508	38.0	326.50
Order clerks I	344	38.0	296.50
Manufacturing	319	38.0	297.00
Order clerks II	948	39.0	393.00
Manufacturing	179	37.5	369.50
Receptionists	89	38.0	304.50
Nonmanufacturing	71	37.5	284.00
Switchboard operators	349	38.0	298.00
Manufacturing	74	38.5	322.00
Nonmanufacturing	275	38.0	292.00
Transportation and utilities	39	40.0	360.00
Switchboard operator-receptionists	1,188	38.5	292.00
Manufacturing	429	38.5	290.50
Nonmanufacturing	759	38.5	292.50
Professional and technical occupations - men			
Computer systems analysts:			
Manufacturing	634	39.5	759.50
Computer systems analysts I:			
Manufacturing	80	40.0	651.00
Computer systems analysts II:			
Manufacturing	306	39.0	718.50
Nonmanufacturing:			
Transportation and utilities	80	40.0	885.00
Computer systems analysts III:			
Manufacturing	241	39.5	844.00
Computer programmers	2,445	39.0	551.50
Manufacturing	661	39.0	547.50
Nonmanufacturing	1,784	39.0	553.00
Transportation and utilities	108	40.0	675.00
Computer programmers I	462	38.5	425.00
Manufacturing	142	39.5	439.00
Nonmanufacturing	320	38.0	419.00

See footnotes at end of tables.

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Philadelphia, PA-NJ, November 1988 —Continued

Sex,[4] occupation, and industry division	Number of workers	Average (mean[5])	
		Weekly hours[1] (standard)	Weekly earnings (in dollars)[2]
Computer programmers II	1,094	39.0	513.00
Manufacturing	297	38.5	505.50
Nonmanufacturing	797	39.0	515.50
Computer programmers III	781	39.0	644.50
Manufacturing	195	39.0	658.50
Nonmanufacturing	586	38.5	640.00
Transportation and utilities	76	40.0	711.50
Computer programmers IV	107	39.5	810.50
Nonmanufacturing	81	39.5	822.50
Computer operators:			
Manufacturing	317	39.5	411.50
Nonmanufacturing:			
Transportation and utilities	170	40.0	453.50
Computer operators I:			
Manufacturing	82	40.0	327.50
Nonmanufacturing:			
Transportation and utilities	39	40.0	417.00
Computer operators II:			
Manufacturing	121	39.5	400.50
Computer operators III:			
Manufacturing	96	39.5	473.50
Peripheral equipment operators	100	38.5	335.00
Nonmanufacturing	100	38.5	335.00
Drafters	1,248	39.5	497.50
Manufacturing	683	39.5	517.00
Nonmanufacturing	565	40.0	474.50
Transportation and utilities	33	40.0	568.50
Drafters III:			
Manufacturing	197	39.0	396.50
Drafters IV:			
Manufacturing	188	39.5	526.50
Drafters V:			
Manufacturing	237	40.0	645.50
Electronics technicians	3,390	40.0	582.50
Manufacturing	818	40.0	468.00
Nonmanufacturing	2,572	40.0	619.00
Electronics technicians II	2,477	40.0	607.00
Manufacturing	313	40.0	442.00
Nonmanufacturing	2,164	40.0	631.00
Electronics technicians III	615	40.0	578.00
Manufacturing	388	40.0	528.50
Professional and technical occupations - women			
Computer systems analysts:			
Manufacturing	240	40.0	721.50
Nonmanufacturing:			
Transportation and utilities	63	40.0	817.00
Computer systems analysts II:			
Nonmanufacturing:			
Transportation and utilities	28	40.0	918.50
Computer systems analysts III:			
Manufacturing	61	40.0	848.00
Computer programmers	1,434	38.5	543.00
Manufacturing	378	38.5	514.50
Nonmanufacturing	1,056	38.5	553.00
Transportation and utilities	48	39.5	609.00
Computer programmers I	386	38.5	429.00
Manufacturing	98	38.5	407.50
Nonmanufacturing	288	38.5	436.00
Computer programmers II	581	38.5	524.00
Manufacturing	177	38.0	496.00
Computer programmers III	422	38.5	650.00
Nonmanufacturing	321	38.5	650.00
Transportation and utilities	27	40.0	661.50
Computer operators:			
Manufacturing	237	39.5	378.50
Computer operators I:			
Manufacturing	79	39.0	327.00
Computer operators II:			
Manufacturing	118	39.5	383.50
Drafters	268	40.0	406.50
Manufacturing	88	39.5	445.00
Registered industrial nurses	195	38.5	512.50
Manufacturing	150	38.5	507.50

See footnotes at end of tables.

Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers in Philadelphia, PA-NJ, November 1988

Occupation and industry division	Number of workers	Hourly earnings (in dollars)[1]			Number of workers receiving straight-time hourly earnings (in dollars) of —																				
		Mean[2]	Median[3]	Middle range[4]	5.00 and under 5.50	5.50 – 6.00	6.00 – 6.50	6.50 – 7.00	7.00 – 7.50	7.50 – 8.00	8.00 – 8.50	8.50 – 9.00	9.00 – 9.50	9.50 – 10.00	10.00 – 10.50	10.50 – 11.00	11.00 – 11.50	11.50 – 12.00	12.00 – 12.50	12.50 – 13.00	13.00 – 13.50	13.50 – 14.00	14.00 – 14.50	14.50 – 15.00	15.00 – 16.00	16.00 – 17.00	17.00 and over
Maintenance carpenters	688	14.15	12.12	12.12–18.08	–	–	–	–	–	–	–	–	–	–	2	17	6	46	295	20	12	24	15	13	35	18	* 185
Manufacturing	180	13.56	13.50	11.56–15.19	–	–	–	–	–	–	–	–	–	–	2	–	–	45	13	16	8	24	14	13	28	17	–
Nonmanufacturing	508	14.35	12.12	12.12–18.08	–	–	–	–	–	–	–	–	–	–	–	17	6	1	282	4	4	–	1	–	7	1	185
Maintenance electricians	2,221	13.77	12.97	12.97–14.85	–	–	–	–	–	–	–	–	–	30	2	18	101	37	95	871	146	179	123	206	196	88	129
Manufacturing	1,188	13.87	13.68	12.82–14.97	–	–	–	–	–	–	–	–	–	30	2	9	95	30	93	43	137	177	89	205	180	78	20
Maintenance painters	151	13.29	13.08	12.12–14.39	–	–	–	–	–	1	1	–	–	–	–	–	10	2	56	5	22	13	6	8	12	11	4
Manufacturing	76	14.19	13.62	13.37–15.60	–	–	–	–	–	–	–	–	–	–	–	–	2	2	–	5	22	12	6	8	9	10	–
Maintenance machinists	1,303	13.86	13.12	12.97–15.28	–	–	–	–	–	–	–	–	–	1	2	8	243	22	37	269	134	25	33	96	289	63	61
Manufacturing	843	13.69	14.02	11.40–15.28	–	–	–	–	–	–	–	–	–	1	2	8	236	15	37	29	53	25	33	96	254	54	–
Maintenance mechanics (machinery)	1,650	13.32	13.66	12.18–14.61	–	–	–	–	–	–	2	3	22	3	254	28	11	35	86	90	188	135	205	271	252	85	–
Manufacturing	1,625	13.32	13.66	12.18–14.61	–	–	–	–	–	–	–	3	22	3	252	26	11	35	84	88	186	135	205	271	252	52	–
Maintenance pipefitters	626	14.60	14.02	13.50–16.00	–	–	–	–	–	–	–	–	–	–	–	6	88	11	3	29	14	126	50	24	118	86	* * 91
Manufacturing	541	14.11	14.02	13.15–15.67	–	–	–	–	–	–	–	–	–	–	–	6	84	9	2	29	14	126	50	24	117	58	22
Millwrights	112	13.45	13.62	12.75–14.69	–	–	–	–	–	–	–	–	–	–	–	14	3	5	3	20	4	32	–	13	18	–	–
Manufacturing	112	13.45	13.62	12.75–14.69	–	–	–	–	–	–	–	–	–	–	–	14	3	5	3	20	4	32	–	13	18	–	–
Motor vehicle mechanics	779	14.00	14.24	13.05–15.62	–	–	–	–	–	12	14	15	–	5	13	31	3	14	46	34	72	103	61	147	46	76	# 87
Manufacturing	298	14.10	14.61	13.65–14.78	–	–	–	–	–	–	–	–	–	4	1	2	–	7	29	7	10	29	50	123	34	2	–
Nonmanufacturing	481	13.93	13.75	12.50–16.15	–	–	–	–	–	12	14	15	–	1	12	29	3	7	17	27	62	74	11	24	12	74	87
Transportation and utilities	369	14.25	14.28	12.50–16.71	–	–	–	–	–	12	14	13	–	1	–	19	3	–	14	20	15	73	11	1	12	74	87
General maintenance workers	2,118	9.58	9.39	7.25–11.72	43	133	148	91	186	187	65	104	118	33	141	85	223	165	54	47	2	70	188	37	18	1	1
Manufacturing	816	11.25	11.09	10.01–11.88	–	–	–	–	4	2	2	64	97	17	39	54	210	156	14	38	–	66	–	37	16	–	–
Nonmanufacturing	1,302	8.53	7.75	6.50–10.00	43	133	148	91	182	185	63	40	21	18	102	31	13	9	40	9	2	4	188	–	–	1	1
Maintenance trades helpers	319	11.62	12.54	9.08–14.71	12	–	–	–	18	4	40	1	6	7	36	12	10	10	1	39	24	8	8	18	65	–	–
Manufacturing	142	10.19	10.05	8.15–12.54	–	–	–	–	18	4	40	–	–	–	18	–	9	4	–	39	10	–	–	–	–	–	–
Machine-tool operators (toolroom)	171	12.62	12.28	11.56–14.23	–	–	–	–	–	–	–	–	–	5	7	8	7	46	19	8	14	9	9	39	–	–	–
Manufacturing	171	12.62	12.28	11.56–14.23	–	–	–	–	–	–	–	–	–	5	7	8	7	46	19	8	14	9	9	39	–	–	–
Tool and die makers	1,048	14.18	14.45	13.58–15.14	–	–	–	–	–	–	–	–	–	–	–	28	10	31	48	21	109	93	200	172	294	42	–
Manufacturing	1,048	14.18	14.45	13.58–15.14	–	–	–	–	–	–	–	–	–	–	–	28	10	31	48	21	109	93	200	172	294	42	–
Stationary engineers	661	13.83	13.50	12.16–15.40	–	–	–	–	–	–	–	–	–	–	11	9	11	14	208	17	11	118	58	2	77	128	1
Manufacturing	500	13.21	12.60	12.16–14.02	–	–	–	–	–	–	–	–	–	–	11	9	9	9	203	17	9	92	47	–	76	18	–
Nonmanufacturing	161	15.74	16.69	14.33–16.77	–	–	–	–	–	–	–	–	–	–	–	–	2	5	3	–	2	24	11	2	1	110	1
Transportation and utilities	135	16.02	16.69	16.69–16.77	–	–	–	–	–	–	–	–	–	–	–	–	–	3	–	–	–	24	5	–	–	103	–

* Workers were distributed as follows: 1 at $17.00 to $18.00; 180 at $18.00 to $19.00; and 4 at $21.00 to $22.00.
* * Workers were distributed as follows: 14 at $17.00 to $18.00; and 77 at $18.00 to $19.00.

All workers were at $17.00 to $18.00.
Also see footnotes at end of tables.

Table A-5. Hourly earnings of material movement and custodial workers in Philadelphia, PA-NJ, November 1988

Occupation and industry division	Number of workers	Hourly earnings (in dollars)[1]			Number of workers receiving straight-time hourly earnings (in dollars) of —																					
		Mean[1]	Median[1]	Middle range[1]	Under 4.00	4.00 and under 4.50	4.50 – 5.00	5.00 – 5.50	5.50 – 6.00	6.00 – 6.50	6.50 – 7.00	7.00 – 7.50	7.50 – 8.00	8.00 – 8.50	8.50 – 9.00	9.00 – 9.50	9.50 – 10.00	10.00 – 10.50	10.50 – 11.00	11.00 – 11.50	11.50 – 12.00	12.00 – 13.00	13.00 – 14.00	14.00 – 15.00	15.00 – 16.00	16.00 – 17.00	17.00 and over
Truckdrivers	7,702	13.27	14.00	12.18–15.13	–	–	–	46	54	30	29	267	58	19	31	74	107	528	89	241	112	682	615	2590	2079	47	6
Manufacturing	1,386	13.41	14.67	12.82–14.67	–	–	–	–	–	–	20	27	17	10	28	13	18	14	20	64	64	109	131	783	15	47	6
Nonmanufacturing	6,316	13.24	14.00	12.11–15.13	–	–	–	46	54	30	9	240	39	9	3	61	89	514	89	177	48	573	484	1807	2064	–	–
Transportation and utilities	3,025	13.54	14.74	12.11–15.51	–	–	–	–	–	–	–	5	6	2	–	47	64	468	48	52	32	510	103	268	1420	–	–
Truckdrivers, light truck	540	7.82	7.00	6.50– 7.60	–	–	–	46	54	26	27	234	23	6	2	4	13	13	3	2	–	48	38	1	–	–	–
Manufacturing	56	9.18	9.90	6.50–10.10	–	–	–	–	–	–	20	3	–	–	–	–	13	9	–	2	–	–	9	–	–	–	–
Nonmanufacturing	484	7.67	7.00	6.30– 7.40	–	–	–	46	54	26	7	231	23	6	2	4	–	4	3	–	–	48	29	1	–	–	–
Transportation and utilities	82	12.64	12.26	12.26–13.49	–	–	–	–	–	–	–	–	–	–	–	–	–	4	–	–	–	48	29	1	–	–	–
Truckdrivers, medium truck:																											
Nonmanufacturing	68	12.82	14.74	10.11–15.13	–	–	–	–	–	–	2	–	8	–	–	6	–	5	2	–	–	–	–	25	20	–	–
Truckdrivers, heavy truck	1,747	13.77	14.00	14.00–15.13	–	–	–	–	–	4	–	9	6	3	1	45	13	49	18	76	31	58	92	682	606	24	–
Manufacturing	161	12.82	12.62	11.97–13.10	–	–	–	–	–	–	–	–	–	–	–	2	1	–	18	–	25	64	24	2	1	24	–
Nonmanufacturing	1,586	13.87	14.00	14.00–15.13	–	–	–	–	–	4	–	9	6	3	1	43	12	49	–	76	6	24	68	680	605	–	–
Transportation and utilities	115	10.20	10.17	9.00–10.25	–	–	–	–	–	–	–	5	4	2	–	40	–	37	–	8	–	–	11	8	–	–	–
Truckdrivers, tractor-trailer	2,892	13.04	12.74	11.65–14.00	–	–	–	–	–	–	–	2	4	10	–	18	64	456	25	133	79	225	465	1116	268	23	6
Manufacturing	327	12.91	13.02	11.65–14.39	–	–	–	–	–	–	–	2	2	10	–	9	–	–	–	58	37	23	94	49	14	23	6
Nonmanufacturing	2,565	13.06	14.00	11.65–14.00	–	–	–	–	–	–	–	–	2	–	–	7	64	456	25	75	42	202	371	1067	254	–	–
Transportation and utilities	1,237	12.45	12.50	10.25–14.78	–	–	–	–	–	–	–	–	2	–	–	7	64	426	9	32	32	184	61	201	239	–	–
Shippers	350	10.33	10.12	7.71–13.03	–	–	–	28	–	4	–	–	67	–	58	–	–	29	13	7	4	28	102	9	1	–	–
Manufacturing	338	10.34	10.12	7.71–13.03	–	–	–	28	–	–	–	–	67	–	58	–	–	28	10	6	4	27	102	8	–	–	–
Receivers	540	11.22	11.14	9.77–13.74	–	2	2	1	2	1	8	6	6	17	16	37	42	105	19	48	12	76	106	34	–	–	–
Manufacturing	336	10.63	10.12	9.50–11.39	–	2	–	–	–	–	1	4	1	13	13	29	37	98	14	48	–	48	8	20	–	–	–
Nonmanufacturing	204	12.20	13.90	10.95–13.90	–	–	2	1	2	1	7	2	5	4	3	8	5	7	5	–	12	28	98	14	–	–	–
Shippers and receivers	1,083	9.11	8.71	8.14– 9.96	–	–	–	–	41	29	43	12	19	244	198	140	89	113	19	52	15	19	29	6	15	–	–
Manufacturing	350	9.22	9.10	7.50–10.23	–	–	–	–	–	28	43	12	13	37	27	45	43	33	6	34	–	11	6	–	12	–	–
Warehousemen	4,524	11.61	11.90	10.38–14.00	–	–	18	59	114	250	139	75	22	60	26	27	15	327	61	688	523	259	304	1479	14	84	–
Manufacturing	984	10.97	10.27	10.14–12.40	–	–	6	–	1	–	18	39	12	51	22	22	13	320	34	18	68	162	148	50	–	–	–
Nonmanufacturing	3,540	11.79	11.95	11.17–14.00	–	–	12	59	113	250	121	36	10	9	4	5	2	7	27	670	455	97	156	1429	14	84	–
Transportation and utilities	429	12.12	11.90	11.90–13.82	–	–	–	–	–	60	–	2	–	2	–	–	–	–	–	–	218	29	11	29	14	84	–
Order fillers	990	10.60	10.38	8.74–13.83	–	4	22	7	10	13	1	35	120	30	59	31	137	36	5	92	103	20	265	–	–	–	–
Manufacturing	470	9.77	9.85	7.74–11.39	–	–	–	–	9	1	–	31	108	21	27	29	12	21	2	92	99	17	1	–	–	–	–
Nonmanufacturing	520	11.35	13.24	9.93–13.83	–	4	22	7	1	12	1	4	12	9	32	2	125	15	3	–	4	3	264	–	–	–	–
Material handling laborers	2,082	8.64	8.51	5.01–10.38	2	12	7	589	22	115	102	65	42	85	79	108	117	274	50	1	1	29	102	276	4	–	–
Manufacturing	1,027	6.96	5.01	5.01– 9.46	2	–	6	582	15	1	28	9	16	17	11	88	24	151	48	–	–	12	1	12	4	–	–
Nonmanufacturing	1,055	10.27	9.54	7.45–14.01	–	12	1	7	7	114	74	56	26	68	68	20	93	123	2	1	1	17	101	264	–	–	–
Transportation and utilities	371	8.42	8.30	6.75– 9.54	–	–	–	–	–	73	41	32	10	34	18	9	85	52	–	1	–	–	2	14	–	–	–
Forklift operators	4,188	9.08	9.29	6.13–11.29	–	–	299	229	58	672	36	249	29	363	52	119	138	861	16	77	99	484	200	227	–	–	–
Manufacturing	2,068	10.02	10.00	8.30–12.40	–	–	–	68	10	28	34	245	28	209	36	119	137	442	3	77	84	444	78	28	–	–	–
Nonmanufacturing	2,120	8.17	6.13	6.13–10.00	–	–	299	161	48	644	2	4	1	154	16	–	1	419	13	–	15	20	122	201	–	–	–
Guards	10,465	5.47	5.00	4.40– 5.55	398	2296	1309	3036	1033	795	295	414	129	61	64	36	108	18	174	23	41	150	60	19	1	–	5
Manufacturing	512	10.99	10.73	9.79–12.45	–	–	–	–	2	4	3	3	31	–	28	6	55	11	168	7	38	83	54	19	–	–	–
Nonmanufacturing	9,953	5.18	5.00	4.33– 5.50	398	2296	1309	3036	1031	791	292	411	98	61	36	30	53	7	6	18	3	67	6	–	1	–	5
Transportation and utilities	135	9.09	10.03	5.00–12.53	2	12	–	48	–	–	–	–	–	–	2	2	1	1	–	–	–	57	4	–	1	–	5
Guards I	10,004	5.30	5.00	4.35– 5.50	398	2280	1309	3016	977	767	257	396	124	61	34	30	93	6	80	7	34	64	46	19	1	–	5
Manufacturing	323	11.14	10.75	9.79–12.45	–	–	–	–	2	4	3	3	31	–	–	6	41	–	76	–	33	63	42	19	–	–	–
Nonmanufacturing	9,681	5.10	5.00	4.30– 5.50	398	2280	1309	3016	975	763	254	393	93	61	34	24	52	6	4	7	1	1	4	–	1	–	5

See footnotes at end of tables.

Table A-5. Hourly earnings of material movement and custodial workers in Philadelphia, PA-NJ, November 1988 —Continued

Occupation and industry division	Number of workers	Hourly earnings (in dollars)[1]			Number of workers receiving straight-time hourly earnings (in dollars) of —																					
		Mean[2]	Median[2]	Middle range[3]	Under 4.00	4.00 and under 4.50	4.50 – 5.00	5.00 – 5.50	5.50 – 6.00	6.00 – 6.50	6.50 – 7.00	7.00 – 7.50	7.50 – 8.00	8.00 – 8.50	8.50 – 9.00	9.00 – 9.50	9.50 – 10.00	10.00 – 10.50	10.50 – 11.00	11.00 – 11.50	11.50 – 12.00	12.00 – 13.00	13.00 – 14.00	14.00 – 15.00	15.00 – 16.00	16.00 – 17.00	17.00 and over
Guards II	459	9.12	9.93	6.19–11.28	–	16	–	20	58	28	38	18	5	–	30	6	14	11	94	16	7	86	14	–	–	–	–
Manufacturing	189	10.72	10.67	10.23–10.95	–	–	–	–	–	–	–	–	–	–	28	–	14	11	92	7	5	20	12	–	–	–	–
Nonmanufacturing	270	8.00	6.67	5.58–12.53	–	16	–	20	56	28	38	18	5	–	2	6	–	–	2	9	2	66	2	–	–	–	–
Janitors, porters, and cleaners	11,664	6.76	6.61	4.75– 8.05	596	1612	853	1351	893	522	880	1476	557	503	417	436	413	190	301	98	489	78	174	25	–	–	–
Manufacturing	2,121	9.99	10.00	8.90–11.54	–	–	2	40	63	8	76	133	67	54	122	91	352	116	224	60	487	65	159	2	–	–	–
Nonmanufacturing	9,543	6.04	5.50	4.50– 7.25	596	1612	851	1311	630	514	804	1343	490	449	295	345	61	74	77	38	2	13	15	23	–	–	–
Transportation and utilities	350	10.39	10.11	8.95–10.83	–	–	–	–	2	3	1	1	–	2	92	8	54	42	75	17	2	13	15	23	–	–	–

See footnotes at end of tables.

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, in Philadelphia, PA-NJ, November 1988

Sex,[4] occupation, and industry division	Number of workers	Average (mean[2]) hourly earnings (in dollars)[3]
Maintenance, toolroom, and powerplant occupations – men		
Maintenance carpenters:		
Manufacturing	180	13.56
Maintenance electricians	2,195	13.75
Manufacturing	1,188	13.87
Maintenance painters	148	13.25
Manufacturing	76	14.19
Maintenance machinists	1,303	13.86
Manufacturing	843	13.69
Maintenance mechanics (machinery)	1,650	13.32
Manufacturing	1,625	13.32
Maintenance pipefitters	626	14.60
Manufacturing	541	14.11
Millwrights	112	13.45
Manufacturing	112	13.45
Motor vehicle mechanics	779	14.00
Manufacturing	298	14.10
Nonmanufacturing	481	13.93
Transportation and utilities	369	14.25
General maintenance workers	2,114	9.58
Manufacturing	816	11.25
Nonmanufacturing	1,298	8.53
Maintenance trades helpers	308	11.59
Manufacturing	131	10.00
Machine-tool operators (toolroom)	171	12.62
Manufacturing	171	12.62
Tool and die makers	1,046	14.17
Manufacturing	1,046	14.17
Stationary engineers	645	13.80
Manufacturing	500	13.21
Nonmanufacturing	145	15.81
Transportation and utilities	135	16.02
Material movement and custodial occupations – men		
Truckdrivers	7,509	13.29
Manufacturing	1,382	13.41
Nonmanufacturing	6,127	13.27
Transportation and utilities	2,895	13.51
Truckdrivers, light truck	449	7.55
Manufacturing	56	9.18
Nonmanufacturing:		
Transportation and utilities	33	12.53
Truckdrivers, medium truck:		
Nonmanufacturing	68	12.82
Truckdrivers, heavy truck	1,747	13.77
Manufacturing	161	12.82
Nonmanufacturing	1,586	13.87
Transportation and utilities	115	10.20
Truckdrivers, tractor-trailer	2,877	13.03
Manufacturing	327	12.91
Nonmanufacturing	2,550	13.04
Transportation and utilities	1,237	12.45
Shippers	277	10.68
Manufacturing	267	10.75
Receivers:		
Manufacturing	324	10.67
Shippers and receivers	924	9.07
Manufacturing	344	9.20
Warehousemen	4,120	11.96
Manufacturing	937	10.90
Nonmanufacturing	3,183	12.27
Transportation and utilities	424	12.09
Order fillers	741	11.20
Manufacturing	419	9.88
Material handling laborers:		
Nonmanufacturing:		
Transportation and utilities	371	8.42
Forklift operators	3,946	8.82
Manufacturing	2,036	10.02
Guards:		
Manufacturing	422	10.95
Nonmanufacturing:		
Transportation and utilities	95	10.67
Guards II	402	9.00
Manufacturing	178	10.69
Nonmanufacturing	224	7.67
Janitors, porters, and cleaners:		
Manufacturing	1,512	9.85
Nonmanufacturing:		
Transportation and utilities	280	10.48
Material movement and custodial occupations – women		
Truckdrivers	176	12.16
Nonmanufacturing:		
Transportation and utilities	130	14.40
Shippers	71	8.83
Manufacturing	71	8.83
Order fillers:		
Manufacturing	51	8.87
Shipping packers:		
Manufacturing	124	9.61
Material handling laborers:		
Manufacturing	97	9.62
Guards:		
Nonmanufacturing:		
Transportation and utilities	40	5.33
Janitors, porters, and cleaners:		
Nonmanufacturing:		
Transportation and utilities	70	10.02

See footnotes at end of tables.

Table A-7. Indexes of earnings and percent increases for selected occupational groups, Philadelphia, PA-NJ, selected periods

Period*	All industries					Manufacturing					Nonmanufacturing			
	Office clerical	Electronic data processing	Industrial nurses	Skilled maintenance	Unskilled plant	Office clerical	Electronic data processing	Industrial nurses	Skilled maintenance	Unskilled plant	Office clerical	Electronic data processing	Industrial nurses	Unskilled plant
Indexes (November 1977=100):														
November 1987	184.6	193.4	188.0	178.8	177.3	180.3	186.9	189.0	180.3	(*)	187.2	197.3	(*)	172.3
November 1988	194.6	205.2	197.6	186.8	182.1	188.6	195.7	201.1	189.7	(*)	198.1	210.5	(*)	176.3
Percent increases:														
November 1972 to November 1973	5.9	(*)	7.2	7.1	9.3	6.5	(*)	7.1	7.0	8.2	5.4	(*)	6.1	10.5
November 1973 to November 1974	9.0	9.1	10.7	9.5	10.1	9.8	10.5	10.8	9.9	10.8	8.4	8.4	10.5	9.4
November 1974 to November 1975	7.9	8.1	8.6	9.5	9.2	8.3	5.8	8.5	10.3	10.2	7.6	8.8	8.6	8.3
November 1975 to November 1976	7.1	6.7	8.3	8.8	6.8	7.4	8.0	8.5	8.7	8.7	6.9	6.0	7.5	5.5
November 1976 to November 1977	7.1	7.4	8.7	8.1	7.2	8.7	8.1	8.5	8.4	7.5	5.7	6.6	9.5	6.9
November 1977 to November 1978	6.7	6.2	8.5	8.1	8.7	7.0	6.7	9.0	8.5	9.6	8.5	5.7	8.7	7.9
November 1978 to November 1979	7.9	8.1	9.4	8.8	10.0	8.4	7.7	9.9	9.3	10.0	7.4	9.3	7.4	10.2
November 1979 to November 1980	9.3	9.4	9.1	10.1	9.8	9.4	8.2	8.6	10.3	10.9	9.2	9.9	10.9	8.9
November 1980 to November 1981	9.7	8.8	8.7	9.2	8.0	10.0	9.3	8.9	9.4	9.7	9.4	8.6	7.9	6.7
November 1981 to November 1982	6.9	8.0	7.6	6.6	6.6	6.6	6.1	7.7	6.6	7.5	7.1	8.8	7.3	5.8
November 1982 to November 1983	5.2	6.7	6.3	4.1	4.3	4.2	5.4	5.7	4.0	4.2	6.0	7.3	(*)	4.3
November 1983 to November 1984	4.9	5.3	4.5	4.2	2.7	4.3	5.1	4.6	4.0	3.8	5.3	5.3	(*)	2.0
November 1984 to November 1985	4.5	5.0	3.5	3.5	2.4	4.4	5.2	2.7	3.6	2.7	4.5	4.9	(*)	2.2
November 1985 to November 1986	4.2	6.0	4.7	2.9	4.0	3.1	4.8	4.0	2.8	2.5	4.9	6.6	(*)	4.9
November 1986 to November 1987	4.2	4.8	3.1	2.7	2.8	3.6	6.1	4.9	2.7	(*)	4.6	4.2	(*)	3.3
November 1987 to November 1988	5.4	6.1	5.1	4.5	2.7	4.6	4.7	6.4	5.2	(*)	5.8	6.7	(*)	2.9

See footnotes at end of tables.

Table A-8. Pay relationships in establishments with paired office clerical occupations, Philadelphia, PA-NJ, November 1988

Occupation for which earnings are compared	Occupation for which average earnings equal 100																							
	Secretaries				Stenographers	Typists		Word processors		Key entry operators		Accounting clerks			Payroll clerks	File clerks		Messengers	Order clerks		Receptionists	Switchboard operators	Switchboard operator-receptionists
	I	II	III	IV	I	I	II	I	II	I	II	I	II	III		I	II		I	II			
Secretaries I	100	89	83	73	(*)	115	110	111	97	117	106	123	106	96	91	141	139	134	106	(*)	107	114	117
Secretaries II	112	100	89	79	(*)	126	112	124	103	128	110	132	113	101	107	148	151	133	117	(*)	116	114	121
Secretaries III	120	112	100	86	133	160	130	129	112	150	123	143	127	116	122	183	186	144	132	(*)	137	130	133
Secretaries IV	137	127	116	100	149	191	148	147	128	172	135	163	150	130	131	222	191	173	122	(*)	167	141	161
Stenographers I	(*)	(*)	75	67	100	132	102	(*)	(*)	(*)	(*)	(*)	91	75	76	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Typists I	87	79	62	52	76	100	81	89	74	100	75	94	86	66	69	104	(*)	107	89	(*)	91	77	79
Typists II	91	89	77	68	98	123	100	104	92	117	96	107	102	85	88	(*)	121	110	(*)	(*)	96	96	(*)
Word processors I	90	81	77	68	(*)	112	96	100	82	109	97	120	98	84	93	140	(*)	119	(*)	(*)	104	99	101
Word processors II	103	97	89	78	(*)	134	109	121	100	129	112	144	113	90	96	161	(*)	143	(*)	(*)	119	117	124
Key entry operators I	85	78	66	58	(*)	100	86	92	77	100	85	104	88	76	83	120	111	110	96	73	93	90	99
Key entry operators II	94	91	81	74	(*)	134	104	103	89	118	100	109	105	93	98	(*)	133	113	104	(*)	104	108	(*)
Accounting clerks I	82	76	70	61	(*)	106	94	83	70	96	92	100	83	62	82	118	(*)	110	89	(*)	97	95	92
Accounting clerks II	94	89	79	66	109	116	96	103	89	114	96	121	100	85	93	135	121	124	95	90	100	103	113
Accounting clerks III	104	99	86	77	134	151	117	120	111	131	107	162	118	100	110	(*)	135	139	109	(*)	125	117	123
Payroll clerks	110	93	82	76	132	145	113	108	102	120	102	122	107	91	100	146	134	142	98	(*)	112	104	120
File clerks I	71	67	55	45	(*)	96	(*)	72	62	83	(*)	84	74	(*)	69	100	(*)	111	74	62	81	70	76
File clerks II	72	66	60	52	(*)	(*)	83	(*)	(*)	90	75	(*)	83	74	75	(*)	100	96	(*)	(*)	83	(*)	78
Messengers	75	75	70	58	(*)	94	91	84	70	91	88	91	80	72	70	90	104	100	69	(*)	80	93	78
Order clerks I	94	85	76	82	(*)	112	(*)	(*)	(*)	104	96	112	105	92	102	135	(*)	145	100	81	106	129	104
Order clerks II	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	137	(*)	(*)	112	(*)	(*)	161	(*)	(*)	123	100	(*)	(*)	136
Receptionists	93	88	73	60	(*)	109	104	96	84	108	96	104	100	80	89	124	121	125	94	(*)	100	96	91
Switchboard operators	88	88	77	71	(*)	130	102	101	86	112	94	105	97	88	96	143	(*)	108	78	(*)	104	100	94
Switchboard operator-receptionists	85	83	75	62	(*)	127	(*)	99	80	101	(*)	108	89	81	83	131	129	128	96	74	110	106	100

NOTE: This matrix table shows the average (mean) relationship of earnings in establishments between any two occupations compared. Earnings for an occupation in the table stub are expressed as a percent of the earnings for an occupation in the column heading at the point where the data lines for the two intersect. For example, reading across the Secretaries II row, the 112 in the Secretaries I column indicates that Secretaries II average 112 percent of (or 12 percent more than) the earnings of Secretaries I.

See appendix A for method of computation.

Also see footnotes at end of tables.

Table A-9. Pay relationships in establishments with paired professional and technical occupations, Philadelphia, PA-NJ, November 1988

Occupation for which earnings are compared	Occupation for which average earnings equal 100																
	Computer systems analysts			Computer programmers				Computer operators				Peripheral equipment operators	Computer data librarians	Electronics technicians			Registered industrial nurses
	I	II	III	I	II	III	IV	I	II	III	IV			I	II	III	
Computer systems analysts I	100	85	71	127	110	87	75	197	166	149	123	203	189	(*)	136	(*)	121
Computer systems analysts II	118	100	84	154	133	106	87	226	186	165	(*)	191	213	192	154	138	134
Computer systems analysts III	140	118	100	174	184	129	106	263	223	190	(*)	231	257	(*)	162	152	144
Computer programmers I	79	65	57	100	81	68	63	140	121	110	(*)	152	130	143	116	(*)	97
Computer programmers II	91	75	61	123	100	82	(*)	177	142	124	101	182	148	(*)	123	107	110
Computer programmers III	115	94	77	147	122	100	81	213	172	147	125	202	178	(*)	138	(*)	130
Computer programmers IV	134	114	95	159	(*)	124	100	(*)	220	183	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Computer operators I	51	44	36	72	57	47	(*)	100	81	70	(*)	109	88	99	90	(*)	83
Computer operators II	60	54	45	83	70	58	45	124	100	84	62	112	105	(*)	(*)	(*)	75
Computer operators III	67	61	53	91	81	68	55	144	119	100	80	128	124	122	108	100	87
Computer operators IV	81	(*)	(*)	(*)	99	80	(*)	(*)	162	126	100	(*)	(*)	(*)	(*)	(*)	101
Peripheral equipment operators	49	52	43	66	55	50	(*)	91	89	78	(*)	100	84	(*)	(*)	(*)	83
Computer data librarians	53	47	39	77	67	56	(*)	113	95	81	(*)	119	100	(*)	(*)	(*)	77
Electronics technicians I	(*)	52	(*)	70	(*)	(*)	(*)	101	(*)	82	(*)	(*)	(*)	100	84	64	(*)
Electronics technicians II	74	65	62	86	81	72	(*)	111	(*)	93	(*)	(*)	(*)	119	100	(*)	(*)
Electronics technicians III	(*)	73	66	(*)	93	(*)	(*)	(*)	(*)	100	(*)	(*)	(*)	156	(*)	100	94
Registered industrial nurses	83	75	69	103	91	77	(*)	160	133	114	99	159	130	(*)	(*)	106	100

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

Table A-10. Pay relationships in establishments with paired maintenance, toolroom, and powerplant occupations, Philadelphia, PA-NJ, November 1988

Occupation for which earnings are compared	Occupation for which average earnings equal 100												
	Carpenters	Electricians	Painters	Machinists	Maintenance mechanics (machinery)	Pipefitters	Millwrights	Motor vehicle mechanics	Maintenance workers (general)	Trades helpers	Machine-tool operators (toolroom)	Tool and die makers	Stationary engineers
Maintenance carpenters	100	96	(*)	95	99	100	102	102	(*)	129	102	94	100
Maintenance electricians	104	100	106	99	101	100	101	101	112	132	104	98	102
Maintenance painters	(*)	94	100	93	96	97	99	98	101	(*)	(*)	86	98
Maintenance machinists	105	101	108	100	102	101	106	102	108	134	103	98	103
Maintenance mechanics (machinery)	101	99	104	98	100	99	(*)	100	123	124	102	(*)	103
Maintenance pipefitters	100	100	104	99	101	100	100	102	(*)	132	101	93	100
Millwrights	98	99	101	94	(*)	100	100	101	(*)	(*)	101	93	100
Motor vehicle mechanics	96	99	102	98	100	98	99	100	(*)	(*)	102	(*)	101
General maintenance workers	(*)	89	90	92	81	(*)	(*)	(*)	100	121	(*)	82	(*)
Maintenance trades helpers	78	76	(*)	75	81	76	(*)	(*)	83	100	86	73	76
Machine-tool operators (toolroom)	98	98	(*)	97	98	99	99	98	(*)	117	100	94	100
Tool and die makers	106	102	117	102	(*)	107	107	(*)	121	137	106	100	109
Stationary engineers	100	98	102	97	97	100	100	99	(*)	131	100	92	100

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

Table A-11. Pay relationships in establishments with paired material movement and custodial occupations, Philadelphia, PA-NJ, November 1988

Occupation for which earnings are compared	Occupation for which average earnings equal 100												
	Truckdrivers			Shippers	Receivers	Shippers and receivers	Warehouse-men	Order fillers	Material han-dling laborers	Forklift operators	Guards		Janitors, por-ters, and cleaners
	Light truck	Heavy truck	Tractor-trailer								I	II	
Truckdrivers, light truck	100	(1)	(1)	(1)	99	(1)	104	(1)	106	(1)	(1)	(1)	117
Truckdrivers, heavy truck	(1)	100	96	124	128	(1)	112	146	135	117	(1)	(1)	145
Truckdrivers, tractor-trailer	(1)	102	100	123	128	(1)	(1)	129	136	115	154	111	132
Shippers	(1)	81	81	100	96	(1)	102	115	115	104	113	(1)	119
Receivers	101	78	78	104	100	(1)	106	115	124	99	137	113	120
Shippers and receivers	(1)	(1)	(1)	(1)	(1)	100	88	(1)	84	86	115	100	110
Warehousemen	96	89	(1)	96	95	113	100	113	(1)	96	125	110	118
Order fillers	(1)	68	77	87	87	(1)	88	100	79	84	100	73	102
Material handling laborers	94	74	73	87	91	119	(1)	127	100	87	140	(1)	112
Forklift operators	(1)	86	87	98	101	116	104	118	114	100	(1)	(1)	114
Guards I	(1)	(1)	65	88	73	87	80	100	72	(1)	100	84	100
Guards II	(1)	(1)	90	(1)	89	100	91	136	(1)	(1)	119	100	118
Janitors, porters, and cleaners	85	89	76	84	83	91	86	98	89	88	97	86	100

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

Table A-12. Weekly earnings of office workers in establishments employing 500 workers or more in Philadelphia, PA-NJ, November 1988

Occupation and industry division	Number of workers	Average weekly hours[1] (standard)	Weekly earnings (in dollars)[2]			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean[2]	Median[2]	Middle range[2]	Under 180	180 and under 200	200 – 240	240 – 280	280 – 320	320 – 360	360 – 400	400 – 440	440 – 480	480 – 520	520 – 560	560 – 600	600 – 640	640 – 680	680 – 720	720 – 760	760 – 800	800 – 840	840 – 880	880 – 920	920 and over
Secretarial and keyboarding occupations																										
Secretaries	6,627	38.5	424.50	406.00	350.00– 473.00	–	–	6	130	708	1168	1093	1133	852	564	253	324	140	86	35	31	19	1	11	58	15
Manufacturing	2,558	39.5	431.50	418.00	355.00– 480.00	–	–	–	6	221	431	429	529	298	178	88	215	76	58	14	11	4	–	–	–	–
Nonmanufacturing	4,069	38.0	420.50	401.50	345.50– 468.50	–	–	6	124	487	737	664	604	554	388	185	109	64	28	21	20	15	1	11	58	15
Transportation and utilities	555	39.5	578.50	490.00	468.50– 647.00	–	–	–	–	–	5	32	33	98	137	17	46	45	20	17	11	10	1	11	58	14
Secretaries I	988	39.0	364.00	355.00	324.50– 401.50	–	–	3	67	142	316	200	139	114	6	–	–	1	–	–	–	–	–	–	–	–
Manufacturing	568	38.5	377.00	373.00	345.00– 407.00	–	–	–	–	53	190	147	127	44	6	–	–	1	–	–	–	–	–	–	–	–
Secretaries II	1,658	39.0	401.00	385.00	323.50– 447.50	–	–	3	39	320	261	276	317	89	172	17	110	54	–	–	–	–	–	–	–	–
Manufacturing	699	39.5	429.00	426.50	354.50– 487.00	–	–	–	3	94	85	94	212	27	39	10	86	49	–	–	–	–	–	–	–	–
Nonmanufacturing	959	38.5	380.50	365.00	317.00– 433.00	–	–	3	36	226	176	182	105	62	133	7	24	5	–	–	–	–	–	–	–	–
Secretaries III	2,228	38.5	434.00	410.00	355.50– 477.00	–	–	–	23	183	404	385	352	336	202	70	145	44	5	12	10	5	–	–	52	–
Manufacturing	714	39.5	440.50	438.00	363.00– 493.50	–	–	–	3	54	107	121	75	115	91	41	90	13	3	1	–	–	–	–	–	–
Nonmanufacturing	1,514	38.0	431.00	403.50	352.50– 484.00	–	–	–	20	129	297	264	277	221	111	29	55	31	2	11	10	5	–	–	52	–
Transportation and utilities	214	39.5	639.50	601.00	490.00– 776.00	–	–	–	–	–	–	11	7	19	38	8	24	28	2	11	10	4	–	–	52	–
Secretaries IV	1,258	38.5	459.00	440.00	390.50– 491.00	–	–	–	–	33	119	186	292	242	157	68	35	15	67	18	5	6	–	10	5	–
Manufacturing	441	39.5	476.00	447.00	408.00– 520.50	–	–	–	–	11	20	58	109	96	33	22	22	–	52	10	4	4	–	–	–	–
Nonmanufacturing	817	38.0	449.50	435.50	384.00– 482.00	–	–	–	–	22	99	128	183	146	124	46	13	15	15	8	1	2	–	10	5	–
Transportation and utilities	39	39.5	721.00	686.50	647.00– 870.00	–	–	–	–	–	–	–	–	6	–	–	–	2	9	6	–	1	–	10	5	–
Secretaries V:																										
Manufacturing	136	40.0	481.50	477.00	353.00– 585.50	–	–	–	–	9	29	9	6	16	9	15	17	13	3	3	7	–	–	–	–	–
Nonmanufacturing:																										
Transportation and utilities	57	39.5	717.00	651.50	595.00– 914.00	–	–	–	–	–	–	–	1	–	4	2	8	10	9	–	1	5	1	1	1	* 14
Stenographers	273	39.5	470.50	465.50	411.00– 535.50	–	–	–	10	9	24	19	58	67	3	18	18	4	45	–	–	–	–	–	–	–
Nonmanufacturing	242	39.5	485.00	466.00	420.00– 565.00	–	–	–	7	3	8	19	56	67	3	17	13	4	45	–	–	–	–	–	–	–
Transportation and utilities	241	39.5	486.00	466.00	420.00– 565.00	–	–	–	6	3	8	19	56	67	3	17	13	4	45	–	–	–	–	–	–	–
Stenographers I	219	39.0	426.50	429.50	393.00– 466.00	–	–	–	10	9	24	19	58	67	3	17	12	–	–	–	–	–	–	–	–	–
Nonmanufacturing	189	39.0	438.50	440.00	411.00– 466.00	–	–	–	7	3	8	19	56	67	3	17	9	–	–	–	–	–	–	–	–	–
Transportation and utilities	188	39.0	439.50	440.00	411.50– 466.00	–	–	–	6	3	8	19	56	67	3	17	9	–	–	–	–	–	–	–	–	–
Typists	1,042	39.0	308.50	290.00	238.00– 348.50	6	7	249	212	230	103	19	77	109	10	20	–	–	–	–	–	–	–	–	–	–
Manufacturing	166	39.5	342.50	318.00	282.50– 378.00	–	–	1	35	48	36	8	24	–	–	14	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	876	39.0	302.00	280.50	231.00– 337.50	6	7	248	177	182	67	11	53	109	10	6	–	–	–	–	–	–	–	–	–	–
Transportation and utilities	250	40.0	408.00	440.00	371.00– 461.00	–	–	8	15	21	17	11	53	109	10	6	–	–	–	–	–	–	–	–	–	–
Typists I	473	38.5	259.00	232.50	220.00– 285.00	6	7	242	95	81	28	5	13	12	4	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	57	39.5	304.50	299.50	272.50– 328.50	–	–	–	19	23	10	2	3	–	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	416	38.5	253.00	231.00	218.00– 260.00	6	7	242	76	39	18	3	10	12	4	–	–	–	–	–	–	–	–	–	–	–
Typists II	569	39.0	349.50	317.00	290.00– 421.00	–	–	7	117	169	75	14	64	97	6	20	–	–	–	–	–	–	–	–	–	–
Manufacturing	109	40.0	362.00	335.00	301.00– 426.50	–	–	1	16	25	26	6	21	–	–	14	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	460	39.0	346.50	310.00	286.50– 415.00	–	–	6	101	144	49	8	43	97	6	6	–	–	–	–	–	–	–	–	–	–
Transportation and utilities	165	40.0	445.00	461.00	412.00– 461.00	–	–	–	–	–	5	8	43	97	6	6	–	–	–	–	–	–	–	–	–	–
Word processors	537	38.0	322.50	317.00	281.50– 352.50	–	–	26	98	162	151	46	30	16	8	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	161	39.5	356.50	350.00	311.00– 397.00	–	–	–	17	26	55	26	20	11	6	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	376	37.5	308.00	299.50	276.50– 340.00	–	–	26	81	136	96	20	10	5	2	–	–	–	–	–	–	–	–	–	–	–
Word processors I	303	37.5	301.50	293.00	270.00– 331.00	–	–	24	82	96	74	19	2	6	–	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	80	39.5	340.00	342.00	311.00– 356.50	–	–	–	9	13	41	9	2	6	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	223	37.0	288.00	281.50	266.00– 302.50	–	–	24	73	83	33	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–

See footnotes at end of tables.

Table A-12. Weekly earnings of office workers in establishments employing 500 workers or more in Philadelphia, PA-NJ, November 1988 —Continued

Occupation and industry division	Number of workers	Average weekly hours[1] (standard)	Weekly earnings (in dollars)[2]			Number of workers receiving straight-time weekly earnings (in dollars) of —																			
			Mean[3]	Median[3]	Middle range[3]	Under 180	180 and under 200	200 – 240	240 – 280	280 – 320	320 – 360	360 – 400	400 – 440	440 – 480	480 – 520	520 – 560	560 – 600	600 – 640	640 – 680	680 – 720	720 – 760	760 – 800	800 – 840	840 – 880	880 – 920	920 and over
Word processors II	227	38.5	350.00	341.50	308.00– 386.00	–	–	2	16	62	74	27	28	10	8	–	–	–	–	–	–	–	–	–	–
Manufacturing	74	39.5	377.00	383.00	336.00– 426.50	–	–	–	8	9	11	17	18	5	6	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	153	37.5	337.00	339.00	307.00– 353.50	–	–	2	8	53	63	10	10	5	2	–	–	–	–	–	–	–	–	–	–
Key entry operators	2,641	38.5	302.50	290.00	248.00– 332.00	1	130	416	549	701	330	190	196	83	6	4	9	13	–	13	–	–	–	–	–
Manufacturing	211	39.5	352.00	350.50	280.50– 407.00	–	–	12	37	40	17	35	49	5	6	2	8	–	–	–	–	–	–	–	–
Nonmanufacturing	2,430	38.5	298.00	287.50	246.00– 327.50	1	130	404	512	661	313	155	147	78	–	2	1	13	–	13	–	–	–	–	–
Transportation and utilities	268	40.0	434.50	417.00	416.50– 468.50	–	–	1	–	17	32	1	120	68	–	2	1	13	–	13	–	–	–	–	–
Key entry operators I	1,856	38.0	274.00	269.50	230.00– 303.00	1	130	393	409	426	157	70	36	30	–	2	–	–	–	–	–	–	–	–	–
Manufacturing	61	38.5	296.50	274.00	249.50– 310.50	–	–	8	27	11	3	2	8	2	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	1,595	38.0	273.00	269.50	230.00– 303.00	1	130	385	382	417	154	68	28	28	–	2	–	–	–	–	–	–	–	–	–
Transportation and utilities	86	40.0	367.00	344.50	320.00– 406.50	–	–	1	–	17	32	1	15	18	–	2	–	–	–	–	–	–	–	–	–
Key entry operators II	985	39.0	350.50	330.50	292.00– 401.50	–	–	23	140	273	173	120	160	53	6	2	9	13	–	13	–	–	–	–	–
Manufacturing	150	39.5	374.50	378.00	309.50– 416.50	–	–	4	10	29	14	33	41	3	6	2	8	–	–	–	–	–	–	–	–
Nonmanufacturing	835	38.5	346.00	325.00	290.00– 371.50	–	–	19	130	244	159	87	119	50	–	–	1	13	–	13	–	–	–	–	–
Transportation and utilities	182	40.0	466.00	417.00	417.00– 468.50	–	–	–	–	–	–	–	105	50	–	–	1	13	–	13	–	–	–	–	–
Other clerical occupations																									
Accounting clerks	2,581	38.5	326.00	301.50	253.50– 384.50	28	28	361	591	479	342	140	153	362	42	22	6	7	5	4	4	7	–	–	–
Manufacturing	458	39.5	340.00	322.50	271.00– 400.00	–	–	19	117	86	74	47	29	54	23	9	–	–	–	–	–	–	–	–	–
Nonmanufacturing	2,123	38.5	323.00	297.50	249.50– 377.50	28	28	342	474	393	268	93	124	308	19	13	6	7	5	4	4	7	–	–	–
Transportation and utilities	466	40.0	465.50	468.50	442.50– 468.50	–	–	–	5	14	13	11	57	303	18	12	6	7	5	4	4	7	–	–	–
Accounting clerks I	859	38.0	273.00	244.00	218.00– 296.00	28	28	299	244	94	43	20	54	47	2	–	–	–	–	–	–	–	–	–	–
Manufacturing	67	39.5	286.00	276.00	246.00– 306.00	–	–	9	26	18	10	2	2	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	792	38.0	272.00	244.00	218.00– 289.50	28	28	290	218	76	33	18	52	47	2	–	–	–	–	–	–	–	–	–	–
Accounting clerks II	1,215	38.5	342.00	312.00	269.00– 445.50	–	–	62	313	264	152	47	62	282	22	9	2	–	–	–	–	–	–	–	–
Manufacturing	277	39.5	337.50	320.00	269.00– 400.00	–	–	10	78	48	42	28	15	46	8	2	–	–	–	–	–	–	–	–	–
Nonmanufacturing	938	38.5	343.50	303.50	270.00– 456.00	–	–	52	235	216	110	19	47	236	14	7	2	–	–	–	–	–	–	–	–
Accounting clerks III	419	38.5	368.50	339.00	308.00– 402.00	–	–	–	34	109	117	51	31	30	14	13	4	7	5	4	–	–	–	–	–
Manufacturing	86	39.5	377.00	364.00	288.00– 468.50	–	–	–	13	19	10	8	10	8	11	7	–	–	–	–	–	–	–	–	–
Nonmanufacturing	333	38.5	366.50	339.00	312.00– 377.50	–	–	–	21	90	107	43	21	22	3	6	4	7	5	4	–	–	–	–	–
Transportation and utilities	49	39.5	544.00	542.50	478.50– 629.00	–	–	–	–	–	1	1	–	20	2	5	4	7	5	4	–	–	–	–	–
Accounting clerks IV	86	39.0	416.00	360.50	331.00– 409.50	–	–	–	–	12	30	21	5	3	4	–	–	–	–	–	4	7	–	–	–
Nonmanufacturing	58	38.5	433.50	360.00	330.00– 414.00	–	–	–	–	11	18	12	3	3	–	–	–	–	–	–	4	7	–	–	–
Payroll clerks	402	38.5	333.00	322.00	271.50– 360.00	1	5	24	82	78	110	49	12	14	5	12	2	3	–	5	–	–	–	–	–
Manufacturing	104	39.0	392.00	365.00	347.50– 454.50	–	–	–	6	12	24	26	8	13	5	6	2	2	–	–	–	–	–	–	–
Nonmanufacturing	298	38.0	312.50	307.50	253.00– 348.50	1	5	24	76	66	86	23	4	1	–	6	–	1	–	5	–	–	–	–	–
File clerks	1,176	38.0	231.50	222.00	206.00– 243.00	25	125	679	246	63	18	7	12	1	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	1,145	38.0	228.50	220.00	206.00– 242.50	25	125	676	242	58	17	–	1	1	–	–	–	–	–	–	–	–	–	–	–
File clerks I	603	37.5	214.50	209.50	200.00– 220.50	25	123	386	50	17	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	598	37.5	213.50	209.50	200.00– 220.50	25	123	386	47	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
File clerks II	539	38.5	244.00	232.50	222.00– 263.00	–	2	288	190	43	16	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	534	38.5	244.00	232.50	222.00– 263.00	–	2	287	190	39	16	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Messengers	248	38.5	308.50	285.50	234.00– 392.00	–	9	63	47	36	17	19	42	4	1	10	–	–	–	–	–	–	–	–	–
Manufacturing	86	39.0	318.50	292.50	228.00– 384.00	–	–	31	9	10	14	5	2	4	1	10	–	–	–	–	–	–	–	–	–
Nonmanufacturing	162	38.5	303.00	284.00	239.50– 393.00	–	9	32	38	26	3	14	40	–	–	–	–	–	–	–	–	–	–	–	–

See footnotes at end of tables.

Table A-12. Weekly earnings of office workers in establishments employing 500 workers or more in Philadelphia, PA-NJ, November 1988 —Continued

Occupation and industry division	Number of workers	Average weekly hours[2] (standard)	Weekly earnings (in dollars)[3]			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean[3]	Median[3]	Middle range[3]	Under 180	180 and under 200	200 – 240	240 – 280	280 – 320	320 – 360	360 – 400	400 – 440	440 – 480	480 – 520	520 – 560	560 – 600	600 – 640	640 – 680	680 – 720	720 – 760	760 – 800	800 – 840	840 – 880	880 – 920	920 and over
Order clerks:																										
Manufacturing	74	39.0	359.00	346.00	279.00– 414.50	–	–	9	10	16	3	12	10	4	–	7	3	–	–	–	–	–	–	–	–	–
Order clerks I	57	39.5	280.50	279.00	223.00– 309.00	2	5	13	11	16	3	4	–	2	–	1	–	–	–	–	–	–	–	–	–	–
Receptionists	68	38.5	317.00	298.00	283.00– 355.50	–	–	10	12	14	18	7	4	1	1	1	–	–	–	–	–	–	–	–	–	–
Switchboard operators	200	38.0	327.00	308.00	262.00– 383.50	1	–	21	49	37	33	36	6	2	8	2	5	–	–	–	–	–	–	–	–	–
Nonmanufacturing	163	38.0	316.00	300.00	262.00– 365.00	1	–	21	45	34	21	29	2	–	6	2	2	–	–	–	–	–	–	–	–	–
Switchboard operator-receptionists	206	38.5	303.00	290.00	257.50– 343.50	–	–	7	90	36	45	16	10	–	2	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	68	39.5	333.00	330.50	290.50– 353.50	–	–	–	11	20	22	5	8	–	2	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	138	38.0	288.50	267.00	252.00– 330.00	–	–	7	79	16	23	11	2	–	–	–	–	–	–	–	–	–	–	–	–	–

* Workers were distributed as follows: 10 at $920 to $960; and 4 at $960 to $1,000.

Also see footnotes at end of tables.

Table A-13. Weekly earnings of professional and technical workers in establishments employing 500 workers or more in Philadelphia, PA-NJ, November 1988

Occupation and industry division	Number of workers	Average weekly hours[1] (standard)	Weekly earnings (in dollars)[2]			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean[3]	Median[3]	Middle range[3]	200 and under 220	220 – 240	240 – 260	260 – 280	280 – 320	320 – 360	360 – 400	400 – 440	440 – 480	480 – 520	520 – 560	560 – 600	600 – 640	640 – 680	680 – 720	720 – 760	760 – 800	800 – 840	840 – 880	880 – 920	920 and over
Computer systems analysts	2,282	39.0	714.50	707.00	616.50– 806.50	–	–	–	–	–	–	37	41	37	61	104	168	249	255	282	301	161	150	135	98	205
Manufacturing	776	40.0	760.00	735.50	666.00– 849.00	–	–	–	–	–	–	–	–	–	–	8	33	93	110	107	103	70	49	54	58	* 91
Nonmanufacturing	1,506	38.5	691.50	692.00	595.00– 778.00	–	–	–	–	–	–	37	41	37	61	96	135	156	145	175	198	91	101	81	38	114
Computer systems analysts I	624	38.5	603.00	609.50	536.50– 688.50	–	–	–	–	–	–	36	41	16	36	58	77	125	70	88	70	18	6	1	4	–
Manufacturing	141	40.0	642.50	633.50	608.50– 686.00	–	–	–	–	–	–	–	–	–	–	2	22	55	32	21	8	1	–	–	–	–
Nonmanufacturing	483	38.0	591.50	604.00	504.00– 701.00	–	–	–	–	–	–	36	41	16	36	54	55	70	38	45	62	17	6	1	4	–
Computer systems analysts II	964	39.0	704.00	692.00	624.00– 762.00	–	–	–	–	–	–	1	–	21	25	48	90	111	155	125	144	74	65	30	19	58
Manufacturing	348	39.5	728.50	709.00	672.00– 779.50	–	–	–	–	–	–	–	–	–	–	6	11	30	67	72	56	41	21	21	12	11
Nonmanufacturing	616	38.5	690.00	664.50	595.00– 742.50	–	–	–	–	–	–	1	–	21	25	42	79	81	88	53	88	33	44	9	7	45
Transportation and utilities	105	40.0	897.00	836.00	792.00–1084.50	–	–	–	–	–	–	–	–	–	–	–	–	–	6	3	12	9	32	–	1	* * 42
Computer systems analysts III	591	39.0	829.50	823.00	727.00– 918.50	–	–	–	–	–	–	–	–	–	–	–	1	13	30	90	82	55	42	69	65	# 144
Manufacturing	277	40.0	856.00	858.00	757.50– 931.00	–	–	–	–	–	–	–	–	–	–	–	–	8	11	14	37	28	26	31	42	80
Nonmanufacturing	314	38.0	806.00	777.50	717.00– 889.50	–	–	–	–	–	–	–	–	–	–	–	1	5	19	76	45	27	16	38	23	64
Computer programmers	2,514	39.0	570.50	560.00	488.00– 633.50	–	–	–	–	8	20	87	222	256	306	355	376	295	163	127	104	99	45	20	21	10
Manufacturing	418	39.5	624.00	622.00	550.00– 696.00	–	–	–	–	–	–	4	19	29	28	33	34	94	59	41	30	19	17	6	4	1
Nonmanufacturing	2,096	39.0	559.50	550.50	477.00– 615.00	–	–	–	–	8	20	83	203	227	278	322	342	201	104	88	74	80	28	14	17	9
Transportation and utilities	147	40.0	660.50	644.50	592.50– 707.50	–	–	–	–	–	–	1	–	1	8	15	20	26	26	12	2	12	10	6	6	–
Computer programmers I	487	38.5	445.50	424.00	402.50– 482.00	–	–	–	–	7	19	73	183	78	82	7	24	7	3	4	–	–	–	–	–	–
Nonmanufacturing	441	38.5	437.50	423.50	402.50– 470.50	–	–	–	–	7	19	69	171	71	81	6	17	–	–	–	–	–	–	–	–	–
Computer programmers II	1,027	39.0	531.00	535.00	490.00– 565.00	–	–	–	–	1	1	14	39	173	210	300	183	57	27	16	5	–	–	1	–	–
Manufacturing	119	39.5	550.00	529.00	480.00– 595.00	–	–	–	–	–	–	–	7	22	23	21	17	8	11	5	4	–	–	1	–	–
Nonmanufacturing	908	39.0	528.50	535.50	492.00– 563.00	–	–	–	–	1	1	14	32	151	187	279	166	49	16	11	1	–	–	–	–	–
Computer programmers III	863	39.0	652.00	633.50	597.00– 701.50	–	–	–	–	–	–	–	–	5	14	48	169	230	129	104	64	54	25	11	9	1
Manufacturing	228	39.5	669.00	653.00	607.50– 714.00	–	–	–	–	–	–	–	–	–	4	11	10	79	42	31	14	14	14	5	3	1
Nonmanufacturing	635	39.0	645.50	633.50	591.50– 701.00	–	–	–	–	–	–	–	–	5	10	37	159	151	87	73	50	40	11	6	6	–
Transportation and utilities	103	40.0	698.50	673.50	608.50– 787.00	–	–	–	–	–	–	–	–	–	–	6	12	18	22	9	2	12	10	6	6	–
Computer programmers IV	136	39.5	799.00	786.00	756.00– 825.50	–	–	–	–	–	–	–	–	–	–	–	–	1	4	3	35	45	20	8	11	9
Nonmanufacturing	112	39.5	806.50	790.50	761.00– 842.50	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	23	40	17	6	11	9
Computer operators	1,518	38.5	393.00	388.50	327.00– 454.00	1	42	35	53	201	232	265	255	185	101	108	18	14	3	2	3	–	–	–	–	–
Manufacturing	411	39.5	422.50	415.00	350.00– 482.00	–	6	4	13	33	58	66	71	44	30	60	12	10	2	2	–	–	–	–	–	–
Nonmanufacturing	1,107	38.5	382.50	382.00	320.00– 438.00	1	36	31	40	168	174	199	184	141	71	48	6	4	1	–	3	–	–	–	–	–
Transportation and utilities	224	40.0	454.00	454.00	400.50– 498.50	–	1	1	1	2	1	37	36	78	38	19	3	3	1	–	3	–	–	–	–	–
Computer operators I	276	39.0	326.00	307.50	264.50– 387.50	1	40	25	19	60	48	22	23	36	2	–	–	–	–	–	–	–	–	–	–	–
Manufacturing	65	40.0	352.00	350.00	295.00– 407.00	–	4	–	5	15	10	9	17	5	–	–	–	–	–	–	–	–	–	–	–	–
Nonmanufacturing	211	38.5	318.00	299.50	251.50– 358.00	1	36	25	14	45	38	13	6	31	2	–	–	–	–	–	–	–	–	–	–	–
Computer operators II	680	38.5	374.50	360.50	317.50– 415.00	–	2	10	34	129	164	145	58	60	51	16	5	6	–	–	–	–	–	–	–	–
Manufacturing	178	39.5	392.00	367.50	328.50– 470.00	–	2	4	8	16	46	41	10	12	18	14	4	3	–	–	–	–	–	–	–	–
Nonmanufacturing	502	38.0	368.00	355.50	317.50– 401.00	–	–	6	26	113	118	104	48	48	33	2	1	3	–	–	–	–	–	–	–	–
Transportation and utilities	82	40.0	458.50	460.50	398.50– 498.50	–	–	–	–	–	–	24	–	35	18	1	1	3	–	–	–	–	–	–	–	–
Computer operators III	499	39.0	440.50	422.50	393.50– 473.00	–	–	–	–	12	20	97	172	79	38	65	5	5	3	2	3	–	–	–	–	–
Manufacturing	137	39.0	469.50	446.00	419.50– 528.50	–	–	–	–	2	2	15	44	27	9	27	2	5	2	2	–	–	–	–	–	–
Nonmanufacturing	362	38.5	429.50	413.00	386.50– 461.50	–	–	–	–	10	18	82	128	52	27	38	3	–	1	–	3	–	–	–	–	–
Transportation and utilities	85	40.0	477.50	470.50	400.50– 524.50	–	–	–	–	–	–	–	31	12	18	18	2	–	1	–	3	–	–	–	–	–
Computer operators IV	63	37.5	517.00	525.00	486.50– 549.00	–	–	–	–	–	–	1	2	10	12	27	8	3	–	–	–	–	–	–	–	–

See footnotes at end of tables.

Table A-13. Weekly earnings of professional and technical workers in establishments employing 500 workers or more in Philadelphia, PA-NJ, November 1988 —Continued

Occupation and industry division	Number of workers	Average weekly hours[1] (standard)	Weekly earnings (in dollars)[2]			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean[3]	Median[3]	Middle range[3]	200 and under 220	220 – 240	240 – 260	260 – 280	280 – 320	320 – 360	360 – 400	400 – 440	440 – 480	480 – 520	520 – 560	560 – 600	600 – 640	640 – 680	680 – 720	720 – 760	760 – 800	800 – 840	840 – 880	880 – 920	920 and over
Peripheral equipment operators	120	38.0	334.50	331.50	281.00– 378.50	–	9	7	14	20	31	21	15	–	–	–	–	3	–	–	–	–	–	–	–
Nonmanufacturing	120	38.0	334.50	331.50	281.00– 378.50	–	9	7	14	20	31	21	15	–	–	–	–	3	–	–	–	–	–	–	–
Computer data librarians	73	39.0	404.50	377.50	346.00– 471.50	–	–	1	1	12	11	15	3	24	3	–	1	1	1	–	–	–	–	–	–
Nonmanufacturing	64	39.0	404.00	377.50	346.00– 471.50	–	–	1	1	9	11	13	2	24	1	–	–	1	1	–	–	–	–	–	–
Drafters	627	39.5	528.00	511.00	422.50– 643.00	–	4	6	3	24	27	59	65	62	72	56	28	57	58	35	64	2	–	2	3	–
Manufacturing	561	39.5	532.50	525.00	426.50– 652.50	–	3	6	3	24	23	47	54	57	61	52	25	54	49	32	64	2	–	2	3	–
Nonmanufacturing	66	40.0	487.00	477.00	393.00– 566.00	–	1	–	–	–	4	12	11	5	11	4	3	3	9	3	–	–	–	–	–	–
Drafters II	50	39.5	385.00	384.00	357.00– 441.50	–	–	3	3	3	15	9	1	10	2	2	2	–	–	–	–	–	–	–	–	–
Drafters III	138	39.5	424.00	422.50	370.00– 470.50	–	–	–	–	9	12	39	30	20	17	3	1	3	4	–	–	–	–	–	–	–
Manufacturing	118	39.0	413.50	422.50	370.00– 470.50	–	–	–	–	9	10	33	27	20	16	3	–	–	–	–	–	–	–	–	–	–
Drafters IV	188	40.0	522.50	504.50	454.50– 577.00	–	–	–	–	–	–	11	31	23	42	32	9	9	16	9	1	–	–	2	3	–
Manufacturing	155	39.5	526.00	509.00	461.50– 580.00	–	–	–	–	–	–	7	23	19	35	30	9	9	11	6	1	–	–	2	3	–
Drafters V	230	40.0	645.50	660.50	604.50– 721.50	–	–	–	–	–	–	–	3	9	11	19	14	45	38	26	63	2	–	–	–	–
Manufacturing	229	40.0	646.00	662.50	604.50– 721.50	–	–	–	–	–	–	–	3	9	10	19	14	45	38	26	63	2	–	–	–	–
Electronics technicians	1,839	40.0	581.50	667.50	506.00– 667.50	–	–	1	–	47	81	117	42	97	204	68	100	14	1068	–	–	–	–	–	–	–
Manufacturing	765	40.0	470.50	484.00	391.00– 523.00	–	–	–	–	45	75	109	41	94	203	52	100	12	34	–	–	–	–	–	–	–
Electronics technicians II:																										
Manufacturing	271	40.0	432.50	393.00	380.00– 468.00	–	–	–	–	–	54	99	29	26	15	9	18	2	19	–	–	–	–	–	–	–
Electronics technicians III	398	40.0	528.50	506.00	492.00– 572.00	–	–	–	–	–	–	–	1	57	188	43	82	10	17	–	–	–	–	–	–	–
Manufacturing	395	40.0	528.50	506.00	492.00– 572.00	–	–	–	–	–	–	–	1	56	188	43	82	10	15	–	–	–	–	–	–	–
Registered industrial nurses	139	39.0	532.50	511.50	493.50– 573.00	–	–	–	–	–	1	13	3	13	42	29	12	7	6	7	3	3	–	–	–	–
Manufacturing	89	39.5	539.50	533.00	493.50– 573.00	–	–	–	–	–	–	5	1	11	25	17	12	5	5	6	2	–	–	–	–	–
Nonmanufacturing	50	38.5	519.50	494.00	479.00– 558.00	–	–	–	–	–	1	8	2	2	17	12	–	2	1	1	1	3	–	–	–	–

* Workers were distributed as follows: 29 at $920 to $960; 21 at $960 to $1,000; 21 at $1,000 to $1,040; 14 at $1,040 to $1,080; and 6 at $1,080 and over.

* * Workers were distributed as follows: 4 at $920 to $960; 2 at $960 to $1,000; 3 at $1,000 to $1,040; 4 at $1,040 to $1,080; 28 at $1,080 to $1,120; and 1 at $1,120 to $1,160.

Workers were distributed as follows: 63 at $920 to $960; 22 at $960 to $1,000; 31 at $1,000 to $1,040; 16 at $1,040 to $1,080; and 12 at $1,080 and over.

Also see footnotes at end of tables.

Table A-14. Average weekly earnings of office, professional, and technical workers, by sex in establishments employing 500 workers or more in Philadelphia, PA-NJ, November 1988

Sex,[4] occupation, and industry division	Number of workers	Average (mean)[2]	
		Weekly hours[1] (standard)	Weekly earnings (in dollars)[3]
Office occupations – men			
Typists:			
Nonmanufacturing:			
Transportation and utilities	30	39.5	437.50
Typists II:			
Nonmanufacturing:			
Transportation and utilities	25	39.5	443.00
Accounting clerks:			
Nonmanufacturing:			
Transportation and utilities	138	40.0	465.00
File clerks	105	37.5	246.00
Nonmanufacturing	97	37.5	233.00
Messengers	159	38.5	304.00
Nonmanufacturing	110	38.0	292.50
Office occupations – women			
Secretaries	6,527	38.5	425.00
Manufacturing	2,556	39.5	431.50
Nonmanufacturing	3,971	38.0	421.00
Transportation and utilities	544	39.5	580.00
Secretaries I	987	39.0	364.00
Manufacturing	568	38.5	377.00
Secretaries II	1,646	39.0	400.50
Manufacturing	698	39.5	429.00
Nonmanufacturing	948	38.5	379.50
Secretaries III	2,178	38.5	436.50
Manufacturing	713	39.5	440.50
Nonmanufacturing	1,465	38.0	434.50
Transportation and utilities	213	39.5	640.50
Secretaries IV	1,252	38.5	459.00
Manufacturing	441	39.5	476.00
Nonmanufacturing	811	38.0	449.50
Transportation and utilities	39	39.5	721.00
Secretaries V:			
Manufacturing	138	40.0	481.50
Nonmanufacturing:			
Transportation and utilities	56	39.5	718.00
Stenographers	261	39.5	472.00
Nonmanufacturing	230	39.5	487.50
Transportation and utilities	229	39.5	488.50
Stenographers I	207	39.0	425.50
Nonmanufacturing	177	39.0	438.00
Transportation and utilities	176	39.0	439.50
Typists	993	39.0	305.50
Manufacturing	163	39.5	339.50
Nonmanufacturing	830	39.0	298.50
Transportation and utilities	220	40.0	404.00
Typists I	452	38.5	258.50
Manufacturing	57	39.5	304.50
Nonmanufacturing	395	38.5	252.00
Typists II	541	39.0	344.50
Manufacturing	106	40.0	358.00
Nonmanufacturing	435	39.0	341.00
Transportation and utilities	140	40.0	445.00
Word processors	497	38.0	322.00
Manufacturing	133	39.5	360.00
Nonmanufacturing	364	37.0	308.00
Word processors I	284	37.5	300.00
Manufacturing	66	39.5	342.50
Nonmanufacturing	218	37.0	287.00
Word processors II	213	38.0	351.00
Manufacturing	67	39.5	377.50
Nonmanufacturing	146	37.5	338.50
Key entry operators	2,359	38.5	300.50
Manufacturing	181	39.5	350.00
Nonmanufacturing	2,178	38.0	298.00
Transportation and utilities	237	40.0	431.50
Key entry operators I	1,432	38.0	269.50
Manufacturing	57	38.5	289.50
Nonmanufacturing	1,375	38.0	268.50
Transportation and utilities	77	40.0	358.00
Key entry operators II	927	39.0	348.00
Manufacturing	124	39.5	378.00
Nonmanufacturing	803	38.5	343.50
Accounting clerks	2,118	38.5	321.50
Manufacturing	414	39.5	335.00
Nonmanufacturing	1,702	38.0	318.00
Transportation and utilities	328	39.5	465.50
Accounting clerks I	688	38.0	266.50
Manufacturing	67	39.5	286.00
Nonmanufacturing	621	38.0	264.50
Accounting clerks II	1,000	38.5	337.00
Manufacturing	252	39.5	335.50
Nonmanufacturing	748	38.5	337.50
Accounting clerks III	358	38.5	365.50
Manufacturing	68	39.5	365.50
Nonmanufacturing	290	38.5	365.00
Transportation and utilities	44	39.5	537.00
Accounting clerks IV	68	39.0	408.50
Payroll clerks	327	38.5	332.50
Manufacturing	94	39.0	377.00
Nonmanufacturing	233	38.0	314.50
File clerks	1,071	38.0	230.00
Nonmanufacturing	1,048	38.0	228.00
File clerks I	563	37.5	213.00
Nonmanufacturing	558	37.5	212.50
File clerks II	484	38.5	245.50
Nonmanufacturing	479	38.5	245.00
Messengers:			
Nonmanufacturing	52	39.0	325.00
Order clerks:			
Manufacturing	61	39.0	336.50
Receptionists	64	38.5	318.50
Switchboard operators	190	38.0	326.50
Nonmanufacturing	153	37.5	314.50
Switchboard operator-receptionists	206	38.5	303.00
Manufacturing	68	39.5	333.00
Nonmanufacturing	138	38.0	288.50
Professional and technical occupations – men			
Computer systems analysts	1,207	39.5	750.00
Manufacturing	506	40.0	775.00
Computer systems analysts I:			
Manufacturing	76	40.0	651.00
Computer systems analysts II:			
Manufacturing	214	40.0	736.50
Nonmanufacturing:			
Transportation and utilities	77	40.0	889.00
Computer systems analysts III	377	39.5	838.00
Manufacturing	212	40.0	857.50
Computer programmers	1,548	39.0	576.50
Manufacturing	248	39.5	623.00
Nonmanufacturing	1,300	39.0	567.50
Transportation and utilities	104	40.0	680.00
Computer programmers I	281	38.5	440.00
Nonmanufacturing	255	38.5	429.50
Computer programmers II	615	39.0	533.00
Manufacturing	63	40.0	541.50
Nonmanufacturing	552	39.0	532.00
Computer programmers III	560	39.0	653.50
Manufacturing	136	39.5	652.00
Nonmanufacturing	424	39.0	654.00
Transportation and utilities	76	40.0	711.50
Computer programmers IV	91	39.5	818.00
Computer operators:			
Manufacturing	245	39.5	431.00
Nonmanufacturing:			
Transportation and utilities	167	40.0	453.50

See footnotes at end of tables.

Table A-14. Average weekly earnings of office, professional, and technical workers, by sex in establishments employing 500 workers or more in Philadelphia, PA-NJ, November 1988—Continued

Sex,[4] occupation, and industry division	Number of workers	Average (mean)[2]	
		Weekly hours[3] (standard)	Weekly earnings (in dollars)[2]
Computer operators I:			
Nonmanufacturing:			
Transportation and utilities	39	40.0	417.00
Computer operators II	422	38.5	376.50
Manufacturing	102	39.5	402.50
Nonmanufacturing	320	38.0	368.00
Computer operators III:			
Manufacturing	94	39.5	472.00
Peripheral equipment operators	88	38.0	340.00
Nonmanufacturing	88	38.0	340.00
Drafters	569	39.5	537.00
Manufacturing	517	39.5	541.00
Nonmanufacturing	52	40.0	499.00
Drafters III	118	39.0	432.50
Manufacturing	101	39.0	420.50
Drafters IV	172	40.0	524.00
Manufacturing	147	39.5	525.00
Drafters V	221	40.0	648.50
Manufacturing	221	40.0	648.50
Electronics technicians	1,712	40.0	579.50
Manufacturing	737	40.0	472.00
Electronics technicians II:			
Manufacturing	260	40.0	432.00
Electronics technicians III	391	40.0	529.00
Manufacturing	388	40.0	528.50
Professional and technical occupations – women			
Computer systems analysts:			
Manufacturing	233	40.0	722.50
Nonmanufacturing:			
Transportation and utilities	61	40.0	824.50
Computer systems analysts I	309	38.5	571.00
Nonmanufacturing	250	38.5	556.50
Computer systems analysts II:			
Nonmanufacturing:			
Transportation and utilities	28	40.0	918.50
Computer systems analysts III:			
Manufacturing	61	40.0	848.00
Computer programmers	911	39.0	558.50
Nonmanufacturing	772	39.0	549.50
Transportation and utilities	43	39.5	614.00
Computer programmers I	200	38.5	454.00
Nonmanufacturing	180	38.5	449.50
Computer programmers II	384	39.0	527.00
Nonmanufacturing	338	39.0	526.00
Computer programmers III	282	39.0	637.50
Nonmanufacturing	211	39.0	629.50
Transportation and utilities	27	40.0	661.50
Computer operators:			
Computer operators II:			
Manufacturing	73	39.5	379.50
Drafters	58	40.0	438.00
Registered industrial nurses	126	39.0	532.50
Manufacturing	83	39.5	534.50

See footnotes at end of tables.

Table A-15. Hourly earnings of maintenance, toolroom, and powerplant workers in establishments employing 500 workers or more in Philadelphia, PA-NJ, November 1988

Occupation and industry division	Number of workers	Hourly earnings (in dollars)[1]			Number of workers receiving straight-time hourly earnings (in dollars) of —																					
		Mean[2]	Median[2]	Middle range[2]	Under 11.50	11.50 and under 11.75	11.75 – 12.00	12.00 – 12.25	12.25 – 12.50	12.50 – 12.75	12.75 – 13.00	13.00 – 13.25	13.25 – 13.50	13.50 – 13.75	13.75 – 14.00	14.00 – 14.25	14.25 – 14.50	14.50 – 14.75	14.75 – 15.00	15.00 – 15.25	15.25 – 15.50	15.50 – 16.00	16.00 – 16.50	16.50 – 17.00	17.00 – 17.50	17.50 – 18.00	18.00 and over
Maintenance carpenters	649	14.22	12.12	12.12–18.08	23	46	–	270	10	4	11	8	–	2	14	14	–	10	3	–	10	21	17	1	1	–	* 184
Manufacturing	152	13.67	13.93	11.56–15.28	–	45	–	–	3	1	11	8	–	2	14	14	–	10	3	–	10	14	17	–	–	–	–
Nonmanufacturing	497	14.39	12.12	12.12–18.08	23	1	–	270	7	3	–	–	–	–	–	–	–	10	3	–	10	7	–	1	1	–	184
Maintenance electricians	1,640	14.02	12.97	12.97–14.97	15	34	3	6	5	23	838	49	7	41	18	80	36	18	101	7	–	148	84	–	5	4	118
Manufacturing	612	14.65	14.90	13.62–15.62	–	30	–	6	3	23	10	40	7	41	18	80	5	18	100	7	–	132	74	–	4	4	10
Maintenance painters	134	13.28	12.12	12.12–14.89	12	2	–	54	2	2	3	6	–	9	3	–	6	–	8	–	–	12	11	–	4	–	–
Manufacturing	60	14.41	14.39	13.22–15.84	2	2	–	–	–	2	3	6	–	9	3	–	6	–	8	–	–	9	10	–	–	–	–
Maintenance machinists	963	14.54	14.89	12.97–15.62	7	15	7	–	6	10	259	110	5	11	4	27	6	–	63	43	132	114	63	–	–	–	81
Manufacturing	503	14.89	15.28	14.22–15.62	–	15	–	–	6	5	24	29	5	11	4	27	6	–	63	9	132	113	54	–	–	–	–
Maintenance mechanics (machinery)	427	14.58	14.28	14.02–15.40	12	3	9	5	–	21	–	–	–	20	4	137	12	–	10	4	87	52	51	–	–	–	–
Manufacturing	414	14.53	14.24	14.02–15.40	12	3	9	5	–	21	–	–	–	20	4	137	12	–	10	4	87	52	38	–	–	–	–
Maintenance pipefitters	432	15.54	15.67	14.02–16.47	4	9	2	–	3	23	6	14	–	18	6	50	–	12	12	1	2	115	66	–	14	–	* * 77
Manufacturing	347	15.01	15.62	14.02–15.84	–	9	–	–	2	23	6	14	–	18	6	50	–	12	12	–	2	115	58	–	13	–	9
Millwrights	98	13.80	13.62	12.81–14.69	3	–	5	–	3	–	20	2	2	30	2	–	–	8	5	–	–	18	–	–	–	–	–
Manufacturing	98	13.80	13.62	12.81–14.69	3	–	5	–	3	–	20	2	2	30	2	–	–	8	5	–	–	18	–	–	–	–	–
Motor vehicle mechanics	454	15.05	14.83	14.24–16.15	18	7	6	–	1	6	3	5	44	15	–	50	9	50	32	–	–	45	64	12	87	–	–
Manufacturing	177	14.51	14.63	14.24–14.78	–	6	–	–	–	–	2	3	1	14	–	50	–	50	15	–	–	34	2	–	–	–	–
Nonmanufacturing	277	15.39	16.15	13.47–17.15	18	1	6	–	1	6	1	2	43	1	–	–	9	–	17	–	–	11	62	12	87	–	–
Transportation and utilities	181	16.68	16.71	16.15–17.49	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	11	62	12	87	–	–
General maintenance workers	300	11.01	11.42	9.62–12.03	# 150	4	69	8	10	6	1	–	–	38	–	–	–	–	–	18	–	–	–	–	–	–	–
Manufacturing	144	12.39	11.88	11.88–13.50	20	4	60	–	8	–	–	–	–	38	–	–	–	–	–	18	–	–	–	–	–	–	–
Nonmanufacturing	156	9.74	9.72	7.76–11.09	130	–	9	8	2	6	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Maintenance trades helpers	259	12.54	12.98	10.65–15.21	# # 86	9	1	1	–	27	12	7	17	–	9	8	–	18	–	65	–	–	–	–	–	–	–
Manufacturing	94	11.15	12.54	10.05–12.54	41	4	–	–	–	27	12	6	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Machine-tool operators (toolroom)	155	12.86	12.59	11.56–14.60	11	48	–	7	12	8	–	4	10	9	–	9	–	39	–	–	–	–	–	–	–	–	–
Manufacturing	155	12.86	12.59	11.56–14.60	11	48	–	7	12	8	–	4	10	9	–	9	–	39	–	–	–	–	–	–	–	–	–
Tool and die makers	517	14.60	14.97	14.03–15.14	–	–	–	8	–	3	6	3	27	23	12	120	–	10	86	202	–	4	–	13	–	–	–
Manufacturing	517	14.60	14.97	14.03–15.14	–	–	–	8	–	3	6	3	27	23	12	120	–	10	86	202	–	4	–	13	–	–	–
Stationary engineers	346	15.06	15.40	14.02–16.69	9	9	5	7	8	8	7	8	1	2	18	22	36	–	–	13	33	31	10	118	1	–	–
Manufacturing	217	14.32	14.41	13.15–15.40	9	9	–	6	8	8	7	8	1	2	18	18	28	–	–	13	33	30	8	10	–	–	–
Nonmanufacturing	129	16.32	16.69	16.69–16.77	–	–	5	1	–	–	–	8	1	2	18	4	8	–	–	–	–	1	2	108	1	–	–
Transportation and utilities	111	16.54	16.69	16.69–16.77	–	–	3	–	–	–	–	–	–	–	–	18	5	–	–	–	–	–	–	103	–	–	–

* Workers were distributed as follows: 163 at $18.00 to $18.50; 17 at $18.50 to $19.00; and 4 at $21.00 to $21.50.

* * Workers were distributed as follows: 12 at $18.00 to $18.50; and 65 at $18.50 to $19.00.

Workers were distributed as follows: 11 under $7.50; 23 at $7.50 to $7.75; 6 at $7.75 to $8.00; 2 at $8.00 to $8.25; 13 at $8.25 to $8.50; 7 at $8.75 to $9.00; 1 at $9.00 to $9.25; 31 at $9.50 to $9.75; 1 at $9.75 to $10.00; 7 at $10.25 to $10.50; 31 at $10.75 to $11.00; 13 at $11.00 to $11.25; and 4 at $11.25 to $11.50.

Workers were distributed as follows: 25 under $9.25; 7 at $9.75 to $10.00; 32 at $10.00 to $10.25; 1 at $10.50 to $10.75; 11 at $10.75 to $11.00; 1 at $11.00 to $11.25; and 9 at $11.25 to $11.50.

Also see footnotes at end of tables.

Table A-16. Hourly earnings of material movement and custodial workers in establishments employing 500 workers or more in Philadelphia, PA-NJ, November 1988

Occupation and industry division	Number of workers	Hourly earnings (in dollars)[1]			Number of workers receiving straight-time hourly earnings (in dollars) of —																						
		Mean[2]	Median[2]	Middle range[3]	Under 4.00	4.00 and under 4.50	4.50 – 5.00	5.00 – 5.50	5.50 – 6.00	6.00 – 6.50	6.50 – 7.00	7.00 – 7.50	7.50 – 8.00	8.00 – 8.50	8.50 – 9.00	9.00 – 9.50	9.50 – 10.00	10.00 – 10.50	10.50 – 11.00	11.00 – 11.50	11.50 – 12.00	12.00 – 12.50	12.50 – 13.00	13.00 – 14.00	14.00 – 15.00	15.00 – 16.00	16.00 and over
Truckdrivers	3,790	13.76	14.67	13.10–15.51	–	–	–	–	–	18	5	229	16	5	3	9	15	38	58	83	20	357	51	503	967	1394	23
Nonmanufacturing	2,818	13.53	14.65	12.18–15.51	–	–	–	–	–	18	5	229	16	5	3	8	13	35	54	79	10	356	21	402	196	1380	–
Truckdrivers, light truck: Nonmanufacturing: Transportation and utilities	82	12.64	12.26	12.26–13.49	–	–	–	–	–	–	–	–	–	–	–	–	–	4	–	–	–	48	–	29	1	–	–
Truckdrivers, tractor-trailer	903	13.78	13.45	13.35–14.87	–	–	–	–	–	–	–	–	–	–	–	1	–	30	10	43	18	11	28	384	175	209	14
Manufacturing	159	13.95	13.79	13.02–14.70	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	8	1	8	84	49	14	14
Nonmanufacturing	744	13.76	13.45	13.45–15.51	–	–	–	–	–	–	–	–	–	–	–	–	–	30	10	43	10	10	20	300	126	195	–
Shippers	98	12.88	12.85	11.83–13.76	–	–	–	–	–	–	–	–	–	–	–	–	–	7	9	4	4	14	12	44	1	1	–
Manufacturing	91	12.87	12.85	12.07–13.76	–	–	–	–	–	–	–	–	–	–	–	–	–	6	9	4	4	13	12	44	–	–	–
Receivers	270	12.35	12.87	11.32–13.90	–	–	–	1	2	1	4	2	6	3	3	9	9	2	19	18	11	32	13	102	33	–	–
Manufacturing	80	12.12	11.75	10.85–13.09	–	–	–	–	–	–	–	–	1	–	–	1	4	2	14	18	–	4	13	4	19	–	–
Nonmanufacturing	190	12.45	13.90	11.87–13.90	–	–	–	1	2	1	4	2	5	3	3	8	5	–	5	–	11	28	–	98	14	–	–
Shippers and receivers: Manufacturing	129	9.60	9.96	8.68–10.23	–	–	–	–	–	–	3	12	3	9	27	9	12	33	4	–	–	11	–	6	–	–	–
Warehousemen	1,013	11.73	12.00	11.52–13.82	–	–	12	57	57	18	8	17	6	3	4	1	10	7	34	18	251	34	67	258	79	10	64
Manufacturing	303	12.78	13.41	11.52–13.41	–	–	–	–	–	–	–	–	–	–	4	–	8	4	31	18	28	12	–	148	50	–	–
Nonmanufacturing	710	11.28	11.70	9.50–13.83	–	–	12	57	57	18	6	17	6	3	–	1	2	3	3	–	223	22	67	110	29	10	64
Order fillers	612	11.71	11.93	10.38–13.83	–	4	22	7	1	–	1	2	4	7	47	31	9	28	1	81	85	18	2	264	–	–	–
Shipping packers	336	9.93	9.95	9.22–10.92	2	2	20	2	8	4	–	3	–	7	35	21	65	36	49	2	4	58	–	10	8	–	–
Manufacturing	214	10.99	10.77	10.02–12.01	–	–	–	–	–	–	–	–	–	4	6	2	39	36	49	–	4	58	–	8	8	–	–
Material handling laborers	1,121	10.75	10.15	9.21–13.90	–	–	1	5	15	39	39	33	25	49	56	86	108	250	30	–	1	–	29	99	256	–	–
Manufacturing	343	9.89	10.05	9.21–10.15	–	–	–	–	12	–	6	9	9	15	6	66	23	151	28	–	–	–	12	–	6	–	–
Forklift operators	1,975	8.43	8.13	5.94–12.51	–	–	299	161	46	644	2	4	1	–	16	105	57	14	16	77	25	2	119	177	210	–	–
Manufacturing	440	11.37	11.39	9.76–12.90	–	–	–	–	–	–	–	–	–	–	–	105	56	6	3	77	12	2	99	58	22	–	–
Guards	6,136	5.70	5.00	4.50– 5.75	136	1010	830	2006	654	388	223	176	86	59	10	34	61	18	172	21	41	41	85	60	19	1	5
Manufacturing	423	11.34	10.73	10.67–12.45	–	–	–	–	2	4	1	1	–	–	–	6	55	11	166	7	38	40	19	54	19	–	–
Nonmanufacturing	5,713	5.29	5.00	4.50– 5.50	136	1010	830	2006	652	384	222	175	86	59	10	28	6	7	6	14	3	1	66	6	–	1	5
Guards I	5,803	5.44	5.00	4.50– 5.50	136	1010	830	2006	638	380	189	158	81	59	8	28	46	6	78	5	34	40	–	46	19	1	5
Manufacturing	262	11.49	11.61	10.67–12.45	–	–	–	–	2	4	1	1	–	–	–	6	41	–	74	–	33	39	–	42	19	–	–
Nonmanufacturing	5,541	5.16	5.00	4.50– 5.50	136	1010	830	2006	636	376	188	157	81	59	8	22	5	6	4	5	1	1	–	4	–	1	5
Guards II	331	10.28	10.67	8.90–12.53	–	–	–	–	16	8	34	18	5	–	2	6	14	11	94	16	7	1	85	14	–	–	–
Manufacturing	161	11.10	10.67	10.67–11.10	–	–	–	–	–	–	–	–	–	–	–	–	14	11	92	7	5	1	19	12	–	–	–
Nonmanufacturing	170	9.50	9.38	6.87–12.53	–	–	–	–	16	8	34	18	5	–	2	6	–	–	2	9	2	–	66	2	–	–	–
Janitors, porters, and cleaners	5,963	7.28	7.25	4.81– 8.95	307	832	384	377	229	222	378	904	156	471	244	107	217	91	300	98	398	12	39	174	23	–	–
Manufacturing	1,391	10.62	10.60	9.50–11.54	–	–	–	–	4	–	3	73	28	52	85	83	156	29	223	60	396	11	29	159	–	–	–
Nonmanufacturing	4,572	6.26	6.25	4.50– 7.35	307	832	384	377	225	222	375	831	128	419	159	24	61	62	77	38	2	1	10	15	23	–	–
Transportation and utilities	330	10.45	10.29	8.95–10.83	–	–	–	–	–	2	–	–	–	2	92	7	54	30	75	17	2	1	10	15	23	–	–

See footnotes at end of tables.

Table A-17. Average hourly earnings of maintenance, toolroom, powerplant, material movement and custodial workers by sex in establishments employing 500 workers or more in Philadelphia, PA-NJ, November 1988

Sex,[4] occupation, and industry division	Number of workers	Average (mean[5]) hourly earnings (in dollars)[6]
Maintenance, toolroom, and powerplant occupations - men		
Maintenance carpenters:		
Manufacturing	152	13.67
Maintenance electricians	1,617	14.00
Manufacturing	612	14.65
Maintenance painters	131	13.23
Manufacturing	60	14.41
Maintenance machinists	963	14.54
Manufacturing	503	14.89
Maintenance mechanics (machinery)	427	14.58
Manufacturing	414	14.53
Maintenance pipefitters	432	15.54
Manufacturing	347	15.01
Millwrights	98	13.80
Manufacturing	98	13.80
Motor vehicle mechanics	454	15.05
Manufacturing	177	14.51
Nonmanufacturing	277	15.39
Transportation and utilities	181	16.68
General maintenance workers	296	11.02
Manufacturing	144	12.39
Nonmanufacturing	152	9.72
Maintenance trades helpers	248	12.54
Manufacturing	83	10.99
Machine-tool operators (toolroom)	155	12.86
Manufacturing	155	12.86
Tool and die makers	515	14.60
Manufacturing	515	14.60
Stationary engineers	330	15.07
Manufacturing	217	14.32
Nonmanufacturing	113	16.50
Transportation and utilities	111	16.54
Material movement and custodial occupations - men		
Truckdrivers	3,639	13.72
Nonmanufacturing	2,671	13.47
Truckdrivers, light truck:		
Nonmanufacturing:		
Transportation and utilities	33	12.53
Truckdrivers, tractor-trailer	888	13.76
Manufacturing	159	13.95
Nonmanufacturing	729	13.71
Shippers	83	12.79
Manufacturing	80	12.86
Receivers:		
Manufacturing	74	12.20
Shippers and receivers:		
Manufacturing	123	9.57
Warehousemen:		
Manufacturing	260	12.76
Shipping packers:		
Manufacturing	140	11.30
Material handling laborers:		
Manufacturing	246	9.72
Forklift operators:		
Manufacturing	417	11.45
Guards:		
Manufacturing	333	11.39
	290	10.09
Guards II	150	11.10
	3,320	7.63
Janitors, porters, and cleaners	883	10.55
Manufacturing	2,437	6.58
Nonmanufacturing	263	10.51
Transportation and utilities		
Material movement and custodial occupations - women		
Truckdrivers:		
Nonmanufacturing:		
Transportation and utilities	130	14.40
Material handling laborers:		
Manufacturing	97	9.62
	2,254	6.62
Janitors, porters, and cleaners	1,884	5.79
Nonmanufacturing	67	10.21
Transportation and utilities		

See footnotes at end of tables.

Table B-1. Minimum entrance salaries for inexperienced typists and clerks in Philadelphia, PA-NJ, November 1988

Minimum weekly straight-time salary[1]	Inexperienced typists					Other inexperienced clerical workers[2]					
		Manufacturing		Nonmanufacturing			Manufacturing		Nonmanufacturing		
	All industries	All schedules	40 -hour schedules	All schedules	37.5 -hour schedules	All industries	All schedules	40 -hour schedules	All schedules	40 -hour schedules	37.5 -hour schedules
Establishments studied	300	103	(*)	197	(*)	300	103	(*)	197	(*)	(*)
Establishments having a specified minimum	41	17	13	24	12	104	45	35	59	28	23
Under $155	1	1	–	–	–	1	–	–	1	–	1
$155 and under $160	1	–	–	1	1	2	–	–	2	1	1
$160 and under $165	–	–	–	–	–	3	–	–	3	2	–
$165 and under $170	–	–	–	–	–	–	–	–	–	–	–
$170 and under $175	1	–	–	1	1	4	–	–	4	–	4
$175 and under $180	–	–	–	–	–	4	–	–	4	–	2
$180 and under $185	–	–	–	1	–	2	–	–	2	–	2
$185 and under $190	1	–	–	3	3	5	3	2	2	2	2
$190 and under $195	4	1	1	4	2	11	3	2	8	7	1
$195 and under $200	5	1	1	2	1	9	4	3	5	1	4
$200 and under $210	4	2	2	3	2	11	6	4	5	4	3
$210 and under $220	5	2	1	2	–	7	2	2	3	2	1
$220 and under $230	5	3	2	–	–	6	3	2	3	2	1
$230 and under $240	1	1	1	2	1	5	2	2	2	2	–
$240 and under $250	2	–	–	–	–	8	6	5	2	1	1
$250 and under $260	1	1	1	1	–	7	6	6	1	–	–
$260 and under $270	1	–	–	–	–	2	2	1	1	–	–
$270 and under $280	1	1	–	–	–	2	1	–	1	–	–
$280 and under $290	–	–	–	2	–	3	1	1	2	2	–
$290 and under $300	3	1	1	–	–	–	–	–	–	–	–
$300 and under $310	–	–	–	–	–	2	2	1	–	–	–
$310 and under $320	–	–	–	–	–	2	2	2	1	1	–
$320 and under $330	–	–	–	–	–	1	–	–	–	–	–
$330 and under $340	–	–	–	1	–	–	–	–	–	–	–
$340 and under $350	2	1	1	–	–	–	–	–	–	–	–
$350 and under $360	–	–	–	–	–	–	–	–	–	–	–
$360 and under $370	–	–	–	–	–	–	–	–	–	–	–
$370 and under $380	–	–	–	–	–	2	2	2	–	–	–
$380 and under $390	–	–	–	–	–						
$390 and under $400	2	2	2	–	–						
$400 and under $410	17	8	(*)	9	(*)	117	32	(*)	85	(*)	(*)
Establishments having no specified minimum	240	78	(*)	162	(*)	77	26	(*)	51	(*)	(*)
Establishments which did not employ workers in this category	2	–	(*)	2	(*)	2	–	(*)	2	(*)	(*)
Establishments for which data were not available											

See footnotes at end of tables.

Table B-2. Late-shift pay provisions for full-time manufacturing production and related workers in Philadelphia, PA-NJ, November 1988

(All full-time manufacturing production and related workers = 100 percent)

Item	Workers in establishments with late-shift provisions[a]		Workers on late shifts	
	Second shift	Third shift	Second shift	Third shift
Total workers (in percent)	90.3	78.5	20.4	8.5
With no pay differential for late-shift work	5.1	3.8	1.7	.9
With pay differential for late-shift work	85.1	74.7	18.7	7.6
Uniform cents-per-hour differential	55.1	47.2	12.8	6.6
Uniform percentage differential	30.1	20.3	5.9	.9
Other differential	-	7.1	-	.2
By type and amount of pay differential:				
Uniform cents per hour:				
5 cents	1.3	-	.3	-
10 cents	2.7	1.3	.9	.2
12 and under 13 cents	1.1	-	.3	-
15 cents	9.0	3.0	2.1	.4
20 cents	4.8	3.7	1.0	.1
22 cents	4.0	-	.7	-
23 cents	2.4	-	.7	-
25 and under 26 cents	4.8	8.8	.9	2.0
27 cents	3.9	.3	1.0	-
29 cents	-	4.0	-	.4
30 cents	9.0	8.0	2.4	.7
31 cents	-	2.2	-	.7
32 cents	1.0	-	.3	-
35 cents	1.8	1.0	.4	.2
37 cents	-	2.0	-	.2
40 cents	.2	2.8	(b)	.3
41 cents	-	1.9	-	-
45 cents	.4	3.1	.1	.7
50 cents	3.0	1.7	.8	.3
52 cents	-	1.0	-	.1
70 cents	1.3	1.3	.2	(b)
75 cents	-	1.0	-	.2
100 cents	4.4	-	.8	-
Uniform percentage:				
5 percent	1.6	-	.4	-
7 and under 8 percent	2.6	3.5	.4	.1
8 percent	1.5	.4	.8	-
10 percent	22.4	11.3	4.1	.7
12 percent	1.8	2.8	.4	-
15 percent	-	1.2	-	.1
20 percent	-	1.1	-	(b)
Other differential:				
8 hours' pay for reduced hours plus cents	-	4.8	-	.1
6.5 hours plus 10 cents	-	2.8	-	(b)
7 hours plus 50 cents	-	2.0	-	.1
8 hours' pay for 6.5 hours plus 8 percent	-	2.3	-	(b)
Average pay differential (in cents or percent):				
Uniform cents-per-hour differential	31.2	32.4	28.5	32.2
Uniform percentage differential	9.5	10.6	9.4	10.3

[a] Includes provisions not listed separately below.

Also see footnotes at end of tables.

Table B-3. Scheduled weekly hours and days of full-time first-shift workers in Philadelphia, PA-NJ, November 1988

Item	Production and related workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities
All full-time day-shift workers (in percent)	100	100	100	100	100	100	100	100
Scheduled to work-								
20 hours—5 days	(1)	-	1	-	-	-	-	-
28 hours—5 days	1	-	1	-	-	-	-	-
30 hours—5 days	(1)	-	(1)	-	(1)	-	(1)	-
33.5 hours—5 days	-	-	-	-	-	-	-	-
35 hours	2	(1)	3	-	10	9	10	(1)
4 days	(1)	-	(1)	-	-	-	-	-
5 days	2	(1)	3	-	10	9	10	(1)
36 hours—5 days	(1)	-	(1)	-	(1)	-	(1)	-
36.25 hours—5 days	2	4	3	-	1	1	1	-
38.5 hours—5 days	(1)	(1)	(1)	-	-	-	-	-
37.5 hours—5 days	7	8	8	(1)	43	17	51	30
37.75 hours—5 days	-	-	-	-	(1)	2	-	-
38 hours—5 days	-	-	-	-	(1)	-	(1)	-
38.5 hours—5 days	-	-	-	-	4	3	5	-
38.75 hours—5 days	1	2	-	-	1	1	1	-
39 hours—5 days	(1)	-	1	-	-	-	-	-
39.5 hours—5 days	(1)	1	-	-	(1)	2	-	-
40 hours	82	84	81	94	40	66	33	70
4 days	(1)	(1)	-	-	-	-	-	-
5 days	82	84	81	94	40	66	33	70
42 hours—5 days	(1)	1	-	-	-	-	-	-
43.5 hours—5.5 days	(1)	-	-	-	-	-	-	-
44 hours—5.5 days	(1)	1	(1)	-	(1)	-	(1)	-
45 hours	2	-	4	4	-	-	-	-
5 days	2	-	4	4	(1)	-	(1)	-
5.5 days	-	-	-	-	-	-	-	-
48.75 hours—5 days	-	-	1	-	(1)	-	(1)	-
50 hours—5 days	(1)	1	(1)	2	-	-	-	-
Average weekly schedule (in hours)	1	-	-	-	-	-	-	-
	39.7	39.8	39.8	40.4	38.3	39.0	38.1	39.3

See footnotes at end of tables.

Table B-4. Annual paid holidays for full-time workers in Philadelphia, PA-NJ, November 1988

Item	Production and related workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities
All full-time workers (in percent)	100	100	100	100	100	100	100	100
In establishments not providing paid holidays	5	–	9	–	(14)	–	(14)	–
In establishments providing paid holidays	95	100	91	100	99	100	99	100
Number of holidays:								
1 or more half days	2	–	4	–	–	–	–	–
1 holiday	–	–	–	–	(14)	2	–	–
4 holidays	(14)	–	(14)	–	–	–	–	–
6 holidays	13	5	21	(14)	6	5	8	(14)
Plus 1 or more half days	(14)	(14)	(14)	–	(14)	(14)	(14)	–
7 holidays	4	(14)	8	4	5	–	7	3
Plus 1 or more half days	8	4	11	–	3	(14)	4	–
8 holidays	6	3	10	4	10	3	12	3
Plus 1 or more half days	(14)	(14)	(14)	–	1	(14)	1	–
9 holidays	9	5	12	37	13	7	15	22
Plus 1 or more half days	1	1	1	–	1	(14)	1	–
10 holidays	21	31	13	23	33	46	30	29
Plus 1 or more half days	2	4	1	–	2	(14)	3	–
11 holidays	11	21	3	8	15	18	14	19
Plus 1 or more half days	1	–	2	4	1	(14)	1	5
12 holidays	13	21	6	19	8	15	6	20
13 holidays	2	4	(14)	1	(14)	2	–	–
14 holidays	1	2	–	–	(14)	1	–	–
Total paid holiday time[15]:								
2.5 days or more	95	100	91	100	99	98	99	100
3.5 days or more	94	100	89	100	99	98	99	100
6 days or more	93	100	87	100	99	98	99	100
7 days or more	80	95	66	99	93	93	94	99
7.5 days or more	75	95	58	96	93	93	87	97
8 days or more	68	90	48	96	88	92	87	97
9 days or more	61	87	38	92	88	89	70	94
9.5 days or more	52	83	26	55	75	83	55	73
10 days or more	52	82	25	55	61	83	53	73
10.5 days or more	30	51	12	32	60	83	24	44
11 days or more	28	48	11	32	27	36	21	44
11.5 days or more	17	27	7	24	24	36	7	25
12 days or more	16	27	6	20	10	18	6	20
13 days or more	3	6	(14)	1	9	18	–	–
14 days	1	2	–	–	1	3	–	–
					(14)	1	–	
Average number of paid holidays where provided (in days)	9.2	10.4	8.1	10.0	9.5	10.1	9.3	10.3

See footnotes at end of tables.

Table B-5. Paid vacation provisions for full-time workers in Philadelphia, PA-NJ, November 1988

Item	Production and related workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities
All full-time workers (in percent)	100	100	100	100	100	100	100	100
In establishments not providing paid vacations	2	-	3	-	-	-	-	-
In establishments providing paid vacations	98	100	97	100	100	100	100	100
Length-of-time payment	92	89	96	99	100	100	100	100
Percentage payment	6	11	1	1	-	-	-	-
By vacation pay provisions for[1]:								
6 months of service:								
Under 1 week	14	29	2	41	4	14	1	2
1 week	28	19	37	4	61	48	65	55
Over 1 and under 2 weeks	2	3	2	-	7	10	6	2
2 weeks	1	1	2	-	3	2	4	-
4 weeks	-	-	-	-	[3]	-	[3]	-
1 year of service:								
1 week	53	58	49	53	19	13	21	40
Over 1 and under 2 weeks	4	6	[3]	[3]	1	4	[3]	-
2 weeks	40	32	47	47	78	81	78	60
Over 2 and under 3 weeks	1	2	[3]	-	1	2	1	-
3 weeks	[3]	[3]	-	-	[3]	1	-	-
Over 3 and under 4 weeks	-	-	-	-	1	-	1	-
4 weeks	-	-	-	-	-	-	[3]	-
2 years of service:								
1 week	23	23	22	2	1	1	1	3
Over 1 and under 2 weeks	4	8	[3]	[3]	[3]	-	[3]	-
2 weeks	66	57	75	98	94	88	98	97
Over 2 and under 3 weeks	3	7	-	-	2	7	1	-
3 weeks	1	3	-	-	1	3	[3]	-
Over 3 and under 4 weeks	1	2	-	-	1	1	1	-
4 weeks	-	-	-	-	[3]	-	-	-
3 years of service:								
1 week	5	2	8	2	[3]	[3]	[3]	[3]
Over 1 and under 2 weeks	1	3	[3]	[3]	[3]	-	[3]	-
2 weeks	83	80	85	98	95	89	97	98
Over 2 and under 3 weeks	4	9	[3]	[3]	1	7	1	[3]
3 weeks	4	5	3	2	2	3	[3]	-
Over 3 and under 4 weeks	1	2	-	-	1	1	-	[3]
4 weeks	-	-	-	-	-	-	-	-
4 years of service:								
1 week	[3]	1	8	2	[3]	[3]	[3]	[3]
Over 1 and under 2 weeks	83	81	[3]	[3]	94	89	95	98
2 weeks	5	10	4	94	3	6	2	[3]
Over 2 and under 3 weeks	4	5	84	4	2	4	1	-
3 weeks	1	2	[3]	[3]	1	1	[3]	-
Over 3 and under 4 weeks	-	-	4	-	-	-	-	-
4 weeks	-	-	[3]	-	-	-	-	-

See footnotes at end of tables.

Table B-5. Paid vacation provisions for full-time workers in Philadelphia, PA-NJ, November 1988 —Continued

Item	Production and related workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities
5 years of service:								
1 week	2	-	4	-	(1)	-	(1)	-
Over 1 and under 2 weeks	1	-	1	-	(1)	-	(1)	-
2 weeks	59	51	65	77	41	30	44	77
Over 2 and under 3 weeks	8	14	4	(1)	11	15	10	-
3 weeks	26	31	22	23	45	50	44	23
Over 3 and under 4 weeks	2	5	(1)	-	1	4	1	-
4 weeks	-	-	-	-	1	-	1	-
5 weeks	-	-	-	-	(1)	-	(1)	-
8 years of service:								
1 week	2	-	4	-	(1)	-	(1)	-
Over 1 and under 2 weeks	1	-	1	-	-	-	-	-
2 weeks	28	31	26	9	13	20	12	10
Over 2 and under 3 weeks	2	2	3	(1)	9	7	10	-
3 weeks	57	53	60	90	72	64	74	90
Over 3 and under 4 weeks	5	11	(1)	-	2	7	1	-
4 weeks	3	2	3	-	2	2	2	(1)
Over 4 and under 5 weeks	-	-	-	-	1	-	1	-
5 weeks	(1)	-	1	-	1	-	1	-
10 years of service:								
1 week	2	-	4	-	(1)	-	(1)	-
Over 1 and under 2 weeks	1	-	1	-	-	-	-	-
2 weeks	5	1	8	2	3	2	4	(1)
Over 2 and under 3 weeks	1	-	2	-	-	-	-	-
3 weeks	73	77	70	91	75	74	76	85
Over 3 and under 4 weeks	5	11	(1)	(1)	3	8	1	-
4 weeks	9	8	10	6	16	11	18	5
Over 4 and under 5 weeks	2	4	-	-	2	4	1	-
5 weeks	(1)	-	1	1	1	-	1	-
12 years of service:								
1 week	2	-	4	-	(1)	-	(1)	-
Over 1 and under 2 weeks	1	-	1	-	-	-	-	-
2 weeks	5	1	8	2	3	2	4	(1)
Over 2 and under 3 weeks	1	(1)	2	-	(1)	(1)	-	-
3 weeks	68	67	69	89	83	54	86	93
Over 3 and under 4 weeks	6	13	(1)	(1)	11	15	10	1
4 weeks	12	14	11	8	20	22	19	6
Over 4 and under 5 weeks	2	5	-	-	2	6	1	-
5 weeks	(1)	-	1	1	1	-	1	(1)
Over 6 and under 7 weeks	(1)	(1)	-	-	-	-	-	-
15 years of service:								
1 week	2	-	4	-	(1)	-	(1)	-
Over 1 and under 2 weeks	1	-	1	-	-	-	-	-
2 weeks	4	1	7	2	3	2	4	(1)
Over 2 and under 3 weeks	1	-	2	-	-	-	-	-
3 weeks	40	29	48	44	24	17	26	33
Over 3 and under 4 weeks	2	4	(1)	-	9	10	9	1
4 weeks	43	56	30	54	56	65	54	65
Over 4 and under 5 weeks	4	9	(1)	(1)	2	7	1	-
5 weeks	2	1	3	-	5	-	7	1
6 weeks	-	-	-	-	(1)	-	(1)	-
7 weeks	(1)	-	(1)	1	-	-	-	-
8 weeks	(1)	(1)	-	-	-	-	-	-

See footnotes at end of tables.

Table B-5. Paid vacation provisions for full-time workers in Philadelphia, PA-NJ, November 1988 —Continued

Item	Production and related workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities
20 years of service:								
1 week	2	–	4	–	(1)	–	(1)	–
Over 1 and under 2 weeks	1	–	1	–	–	–	–	–
2 weeks	4	1	7	2	3	2	4	(1)
3 weeks	16	17	16	2	7	9	7	4
4 weeks	50	51	50	66	70	57	74	73
Over 4 and under 5 weeks	3	7	(1)	–	2	4	1	–
5 weeks	19	21	17	29	13	23	11	23
Over 5 and under 6 weeks	1	2	(1)	–	1	4	–	–
6 weeks	2	1	2	–	3	–	4	–
Over 6 and under 7 weeks	–	–	–	–	1	–	1	–
8 weeks	(1)	(1)	–	1	–	–	–	–
Over 9 weeks	–	–	–	–	–	–	–	–
25 years of service:								
1 week	2	–	4	–	(1)	–	(1)	–
Over 1 and under 2 weeks	1	–	1	–	–	–	–	–
2 weeks	4	1	7	2	3	2	4	(1)
3 weeks	16	17	16	2	7	8	7	4
4 weeks	26	25	26	1	42	25	47	9
Over 4 and under 5 weeks	1	3	(1)	–	5	2	6	–
5 weeks	40	41	38	88	38	58	33	67
Over 5 and under 6 weeks	1	2	4	7	1	4	–	–
6 weeks	7	11	(1)	–	3	(1)	4	(1)
Over 6 and under 7 weeks	(1)	(1)	–	1	1	–	1	–
8 weeks	(1)	(1)	(1)	–	–	–	–	–
Over 9 weeks	–	–	–	–	–	–	–	–
30 years of service:								
1 week	2	–	4	–	(1)	–	(1)	–
Over 1 and under 2 weeks	1	–	1	–	–	–	–	–
2 weeks	4	1	7	2	3	2	4	(1)
3 weeks	16	17	16	2	7	8	7	4
4 weeks	25	25	26	1	37	25	40	8
Over 4 and under 5 weeks	1	3	(1)	–	1	2	–	–
5 weeks	32	30	34	89	38	37	39	67
Over 5 and under 6 weeks	(1)	–	(1)	–	–	–	–	–
6 weeks	13	19	7	18	12	20	9	20
Over 6 and under 7 weeks	1	2	(1)	–	1	5	(1)	–
7 weeks	2	2	2	7	(1)	–	1	–
Over 7 and under 8 weeks	(1)	1	(1)	–	1	–	–	–
8 weeks	(1)	–	–	1	–	–	–	–
Over 9 weeks	–	–	–	–	–	–	–	–
Maximum vacation available:								
1 week	2	–	4	–	(1)	–	(1)	–
2 weeks	4	1	7	2	3	2	4	(1)
Over 2 and under 3 weeks	1	–	1	–	–	–	–	–
3 weeks	16	17	18	2	7	8	7	4
4 weeks	25	25	26	1	36	25	39	8
Over 4 and under 5 weeks	1	3	(1)	–	1	2	(1)	–
5 weeks	31	28	34	89	36	36	35	67
Over 5 and under 6 weeks	(1)	–	(1)	–	–	–	–	–
6 weeks	14	20	8	18	12	22	9	20
Over 6 and under 7 weeks	1	2	–	–	1	4	–	–
7 weeks	2	2	2	7	(1)	(1)	5	(1)
Over 7 and under 8 weeks	(1)	1	(1)	–	4	–	–	–
8 weeks	–	–	–	1	–	–	–	–
Over 8 and under 9 weeks	–	–	–	–	1	–	1	–
Over 9 weeks	(1)	(1)	–	–	–	–	–	–

See footnotes at end of tables.

Table B-6. Insurance, health, and retirement plans offered to full-time workers in Philadelphia, PA-NJ, November 1988

Item	Production and related workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities
All full-time workers (in percent)	100	100	100	100	100	100	100	100
In establishments offering at least one of the benefits shown below[a]	97	100	95	100	99	100	99	100
Life insurance	94	97	90	98	99	100	99	99
Noncontributory plans	80	94	67	75	91	95	89	74
Accidental death and dismemberment insurance	81	81	82	93	84	74	87	96
Noncontributory plans	69	73	67	93	76	68	79	96
Sickness and accident insurance or sick leave or both	84	87	82	95	98	97	98	99
Sickness and accident insurance	64	80	49	70	65	72	63	41
Noncontributory plans	60	74	48	68	64	66	63	40
Sick leave (full pay and no waiting period)	42	26	56	55	88	88	87	99
Sick leave (partial pay or waiting period)	2	2	2	1	1	2	(b)	-
Long-term disability insurance	24	28	21	26	66	64	66	38
Noncontributory plans	19	21	17	23	53	34	59	35
Hospitalization, surgical, and medical insurance	94	100	90	100	99	100	99	100
Noncontributory plans	65	83	49	92	54	77	47	97
Health maintenance organizations	59	75	45	51	89	92	88	74
Noncontributory plans	27	40	15	21	29	38	27	28
Dental care	65	71	59	61	72	83	69	82
Noncontributory plans	45	61	31	59	48	70	41	82
Vision care	32	43	22	33	22	36	18	41
Noncontributory plans	26	39	16	27	13	28	9	38
Alcohol and drug abuse treatment	71	77	67	97	79	85	78	93
Noncontributory plans	55	66	45	91	63	72	60	89
Hearing care	13	17	9	12	9	18	7	8
Noncontributory plans	9	13	5	6	4	14	1	3
Retirement plans[c]	68	85	52	56	91	92	90	70
Noncontributory plans	58	80	39	56	75	79	74	69
Pension	60	80	42	56	81	82	80	63
Noncontributory plans	57	78	39	56	72	76	71	63
Lump sum	6	3	9	17	12	7	14	28
Noncontributory plans	2	3	2	1	5	4	6	1
Other[d]	15	17	13	2	38	45	36	10
Noncontributory plans	2	3	1	-	10	5	12	6

See footnotes at end of tables.

Table B-7. Health plan participation by full-time workers in Philadelphia, PA-NJ, November 1988

Item	Production and related workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities
All full-time workers (in percent)	100	100	100	100	100	100	100	100
Participating in:								
Hospitalization, surgical, and medical insurance	72	72	71	91	72	75	71	87
Noncontributory plans	53	65	42	85	45	61	40	85
Health maintenance organizations	17	24	10	8	23	22	(*)	(*)
Noncontributory plans	9	15	4	5	9	10	(*)	(*)
Dental care	62	70	55	61	68	82	63	82
Noncontributory plans	45	62	31	59	50	70	43	82
Vision care	29	41	19	32	18	34	13	42
Noncontributory plans	25	36	16	28	13	26	9	39
Alcohol and drug abuse treatment	67	73	60	97	76	82	74	92
Noncontributory plans	54	65	44	91	65	70	63	89
Hearing care	11	15	8	11	6	14	4	6
Noncontributory plans	8	11	5	6	4	12	1	3

See footnotes at end of tables.

Table B-8. Other selected benefits for full-time workers in Philadelphia, PA-NJ, November 1988

Item	Production and related workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities	All industries	Manufacturing	Nonmanufacturing	Transportation and utilities
All full-time workers (in percent)	100	100	100	100	100	100	100	100
In establishments providing:								
Severance pay	29	40	20	32	59	64	57	54
Supplemental unemployment benefits	4	9	–	–	1	3	–	–
Cost-of-living adjustments	12	14	10	37	4	12	2	15
Based on BLS Consumer Price Index	11	12	10	37	4	12	2	15
Other basis than BLS Consumer Price Index	1	2	–	–	–	–	–	–
Paid leave:								
Jury duty	92	99	85	98	99	98	99	99
Funeral	93	100	87	98	99	100	99	99
Military	58	64	52	86	88	81	90	91
Personal leave[1]	31	28	35	[2]	80	47	84	82
1 day	6	11	2	–	10	16	9	3
1.5 days	[3]	–	[3]	–	–	–	–	–
2 days	6	8	3	2	15	12	16	1
2.5 days	–	–	–	–	[3]	2	–	–
3 days	5	2	9	2	16	4	19	[3]
4 days	5	2	8	15	8	3	9	27
4.5 days	[3]	1	–	–	–	–	–	–
5 days	1	–	2	–	3	6	2	1
6 days	[3]	[3]	[3]	–	1	2	[3]	–
7 days	1	[3]	1	4	–	–	–	–
8 days	[3]	[3]	–	–	1	2	–	–
12 days	[3]	–	1	–	–	–	–	–
Variable or unspecified[4]	6	1	10	36	7	1	9	29
Average amount of paid personal leave in establishments providing uniform and specified benefits (in days)	2.9	2.1	3.6	4.3	2.7	2.7	2.6	3.7

See footnotes at end of tables.

Footnotes

Some of these standard footnotes may not apply to this bulletin.

[1] Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.

[2] Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases—but not bonuses—under cost-of-living allowance clauses, and incentive payments, however, are included.

[3] The mean is computed for each job by totaling the earnings of all workers and dividing by the number of workers. The median designates position—one-half of the workers receive the same as or more and one-half receive the same as or less than the rate shown. The middle range is defined by two rates of pay; one-fourth of the workers earn the same as or less than the lower of these rates and one-fourth earn the same as or more than the higher rate.

[4] Earnings data relate only to workers whose sex identification was provided by the establishment.

[5] Estimates for periods ending prior to 1976 relate to men only for skilled maintenance and unskilled plant workers. All other estimates relate to men and women.

[6] Data do not meet publication criteria or data not available.

[7] Formally established minimum regular straight-time hiring salaries that are paid for standard workweeks. Data are presented for all standard workweeks combined, and for the most common standard workweeks reported.

[8] Excludes workers in subclerical jobs such as messenger.

[9] Work schedules collected only for establishments reporting a formal minimum.

[10] Includes all production and related workers in establishments currently operating late shifts, and establishments whose formal provisions cover late shifts, even though the establishments were not currently operating late shifts.

[11] Less than 0.05 percent.

[12] Less than 0.5 percent.

[13] Full and half days are combined. For example, the proportion of workers receiving 10 or more days includes those receiving *at least* 10 full days, or 9 full days and 2 half days, or 8 full days and 4 half days, and so on.

[14] Payments other than "length of time" are converted to an equivalent time basis; for example, 2 percent of annual earnings was considered as 1 week's pay. Periods of service are chosen arbitrarily and do not necessarily reflect individual provisions for progression; for example, changes in proportions at 20 years include changes between 15 and 20 years. Estimates are cumulative. Thus, the proportion eligible for at least 3 weeks' pay for 20 years includes those eligible for at least 3 weeks' pay after fewer years of service.

[15] Estimates listed after type of benefit are for all plans for which at least a part of the cost is borne by the employer. "Noncontributory plans" include only those financed entirely by the employer. Excluded are legally required plans, such as workers' disability compensation, Social Security, and railroad retirement.

[16] Establishments providing more than one type of retirement plan (e.g., an annuity and a lump-sum payment) may cause the sums of the separate plans to be greater than the total for all retirement plans.

[17] "Other" retirement plans provide for a fixed number of payments (more than one) after which payments are discontinued.

[18] Plans intended for use as paid holidays, vacations, or sick leave are not reported as paid personal leave, but are reported as holidays, vacations, or sick leave in accordance with the intent of the plan.

[19] Variable plans include those that provide differing amounts of leave based on length of service; unspecified plans are formal plans with no specified limit.

Appendix A. Scope and Method of Survey

In January 1987, the Bureau began to phase in a new 90-area program to replace the 70-area program that had produced annual surveys since July 1974. When the new plan is fully implemented in 1990, 32 of the areas will be surveyed annually, and two groups of 29 areas will be surveyed in alternate years. (For a full discussion of the change, see Laura Scofea, "BLS Area Wage Surveys Will Cover More Areas," *Monthly Labor Review*, June 1986, pp. 19-23.)

In each area surveyed,[1] the Bureau obtains wages and related benefits data from representative establishments within six broad industry divisions: Manufacturing; transportation, communication, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services. Government operations and the construction and extractive industries are excluded. Small establishments—generally those with fewer than 50 employees—are excluded because they have few incumbents in the occupations studied. Appendix table 1 shows the number of establishments and workers estimated to be within the scope of this survey, as well as the number actually studied.

In the 32 areas surveyed annually, Bureau field representatives obtain data by personal visits at 3-year intervals. In intervening years, only information on employment and occupational earnings is collected by a combination of personal visit, mail questionnaire, and telephone interview from establishments participating in the previous survey.

In the two groups of 29 areas that are surveyed in alternate years, Bureau field representatives obtain data for a given area by personal visits if the previous data for the area were obtained primarily by mail and telephone. Thus, in a 4-year period, an area that was surveyed by personal visit the first year will have no survey in the second, a mail and telephone survey in the third, and none in the fourth. As with annual surveys, information on establishment practices and employee benefits is presented only for surveys conducted by personal visits; when information is collected primarily by mail and telephone, only information on employment and earnings is presented.

A sample of the establishments in the scope of the survey is selected for study prior to each personal visit survey. This sample, minus establishments which go out of business or are no longer within the industrial scope of the survey, is retained until the next personal visit survey is conducted. In most cases, establishments new to the area are not considered in the scope of the survey until the selection of a sample for a personal visit survey.

The sampling procedures involve detailed stratification by industry and number of employees of all establishments within the scope of a survey. From this stratified universe, a probability sample is selected, with each establishment having a predetermined chance of selection. To obtain optimum accuracy at minimum cost, a greater proportion of large than small establishments is selected. When data are combined, each establishment is weighted according to its probability of selection so that unbiased estimates are generated. For example, if one out of four establishments is selected, it is given a weight of 4 to represent itself plus three others. If data are not available for an establishment originally selected, the weights of other similar establishments are increased to account for the missing unit.

Occupations and earnings

Occupations selected for study are common to a variety of manufacturing and nonmanufacturing industries, and are of the following types: (1) Office clerical; (2) professional and technical; (3) maintenance, toolroom, and powerplant; and (4) material movement and custodial. Occupational classification is based on a uniform set of job descriptions designed to take account of interestablishment variation in duties within the same job. Occupations selected for study are listed and described in appendix B, along with corresponding occupational codes and titles from the 1980 edition of the *Standard Occupational Classification Manual*.

Unless otherwise indicated, the earnings data following the job titles are for all industries combined. Earnings data for some of the occupations listed and described, or for some industry divisions within the scope of the survey, are not presented in the A-series tables because either (1) data were insufficient to provide meaningful statistical results, or (2) there is possibility of disclosure of individual establishment data. Earnings data not shown separately for industry divisions are included in data for all industries combined.

Separate data for men and women are not presented when the number of workers not identified by sex is 20 percent or more of the men or women identified in an occupation. Likewise, data are not presented for an occupational level when the number of workers not identified by level is 20 percent or more of the number identified at that level. Data are included in estimates for men and women combined or an overall occupation when sex or level identification is not available.

Occupational employment and earnings data are shown for full-time workers, i.e., those hired to work a regular weekly schedule. Earnings data exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases—but not bonuses—under cost-of-living allowance clauses, and incentive payments, however, are included. Weekly hours for office clerical and professional and technical occupations refer to the standard workweek (rounded to the nearest half hour) for which employees receive regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates). Average weekly earnings for these occupations are rounded to the nearest half dollar. Some A-series tables provide distributions of workers by earnings; changes in the size of earnings intervals are indicated by heavy vertical lines.

These surveys measure the level of occupational earnings in an area at a particular time. Changes in an occupational average over time reflect, in addition to earnings changes, factors such as changes in proportions of workers employed by high- or low-wage firms, or high-wage workers advancing to better jobs and being replaced by new workers at lower rates. Such shifts in employment could decrease an occupational average even though most establishments in an area increased wages since the last survey. Changes in earnings of occupational groups, shown in table A-7, are better indicators of wage trends than are earnings changes for individual jobs within the groups.

Average earnings reflect composite, areawide estimates. Industries and establishments differ in pay level and job staffing, and thus contribute differently to the estimates for each job. Pay averages may fail to reflect accurately the wage differential among jobs in individual establishments.

Average pay levels for men and women in selected occupations should not be assumed to reflect differences in pay of the sexes within individual establishments. Factors which may contribute to differences include progression within established rate ranges (only the rates paid incumbents are collected) and performance of specific duties within the general survey job descriptions. Job descriptions used to classify employees in these surveys usually are more generalized than those used in individual establishments and allow for minor differences among establishments in specific duties performed.

Occupational employment estimates represent the total in all establishments within the scope of the study and not the number actually surveyed. Because occupational structures among establishments differ, estimates of occupational employment obtained from the sample of establishments studied serve only to indicate the relative importance of the jobs studied. These differences in occupational structure do not affect materially the accuracy of the earnings data.

Wage trends for selected occupational groups

Indexes in table A-7 measure wages at a given time expressed as a percent of wages during the base period. Subtracting 100 from the index yields the percent change in wages from the base period to the date of the index. The percent increases in table A-7 relate to wage changes between the indicated dates. Annual rates of increase, where shown, reflect the amount of increase for 12 months when the time span between surveys was other than 12 months. These computations are based on the assumption that wages increased at a constant rate between surveys.

The indexes and percent increases are based on changes in average hourly earnings of men and women in establishments reporting the jobs listed below in both the current and previous year (matched establishments). The data are adjusted to remove the effect on average earnings of employment shifts among establishments and turnover of establishments included in survey samples. The percent increases, however, are still affected by factors other than wage increases. Turnover may affect an establishment average for an occupation when workers are paid under plans providing a range of wage rates for individual jobs. In periods of increased hiring, for example, new employees may enter at the bottom of the range, depressing the average without a change in wage rates.

Occupations used to compute wage trends are:

Office clerical

Secretaries
Stenographers I and II
Typists I and II
Key entry operators I and II
Accounting clerks I, II, III, and IV
Payroll clerks
File clerks I, II, and III
Messengers
Order clerks I and II
Switchboard operators

Electronic data processing

Computer systems analysts
Computer programmers
Computer operators

Industrial nurses

Registered industrial nurses

Skilled maintenance

Carpenters
Electricians
Painters
Machinists
Mechanics (machinery)
Pipefitters
Motor vehicle mechanics
Tool and die makers

Unskilled plant

Janitors, porters, and cleaners
Material handling laborers

Percent changes for individual areas in the program are computed as follows:

1. Each occupation is assigned a weight based on its proportion of employment in the occupational group in the earlier of the two years being compared. If for example, 1,000 workers were reported in the skilled maintenance group in the earlier year and 200 of these workers were painters, the weight assigned to painters would be 0.20. Using a constant employment weight dampens the effects of employment shifts on wage change measures.
2. Average earnings are computed for each occupation for the 2 years being compared. Earnings are used only from matched establishments; that is, establishments that are in the survey both years.

3. Group averages are computed by multiplying the weight of each occupation (step 1) by the occupation's average earnings for each year (step 2). The products are totaled to obtain group averages.
4. The ratio of group averages for 2 consecutive years is computed by dividing the average for the current year by the average for the earlier year. The result—expressed as a percent—less 100 is the percent change.

Pay relationships in establishments

Tables A-8 through A-11 compare average pay of occupations in individual establishments. These comparisons, expressed as pay relatives (pay for one of the occupations equals 100), differ from comparisons of overall survey averages, such as those shown in tables A-1 through A-6. The latter reflect differences in contributions to the survey averages by establishments with disparate pay levels; the pay relative comparisons are not affected by such differences. The following procedures are used to compute relatives in tables A-8 through A-11:

1. Establishments employing workers in both of the paired occupations were identified.

2. Pay levels (averages) for the two occupations were weighted by the combined employment of both jobs to reflect each establishment's contribution to the totals used in this comparison.

3. The weighted pay levels of the two jobs were summed separately; each total was divided by the other and the quotients multiplied by 100 to produce the two pay relatives shown for each job pairing.

Establishment practices and employee benefits

The incidence of selected establishment practices and employee benefits is studied for full-time production and related workers and office workers. Production and related workers (referred to hereafter as production workers) include working supervisors and all nonsupervisory workers (including group leaders and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial and guard services, auxiliary production for plant's own use (e.g., powerplant), and recordkeeping and other services closely associated with the above production operations. (Cafeteria and route workers are excluded in manufacturing industries but included in nonmanufacturing industries.) In finance and insurance, no workers are considered to be production workers. Office workers include working supervisors and all nonsupervisory workers (including lead workers and trainees) performing clerical or related office functions in such departments as accounting, advertising, purchasing, collection, credit, finance, legal, payroll, personnel, sales, industrial relations, public relations, executive, drafting or transportation. Administrative, executive, professional, and part-time employees as well as construction workers utilized as a separate work force are excluded from both the production and office worker categories.

Minimum entrance salaries (table B-1). Minimum entrance salaries for office workers relate only to the establishments visited. Because of the optimum sampling techniques used and the probability that large establishments are more likely than small establishments to have formal entrance rates above the subclerical level, the table is more representative of policies in larger establishments.

Shift differentials–manufacturing (table B-2). Data were collected on policies of manufacturing establishments regarding pay differentials for production workers on late shifts. Establishments considered as having policies are those which (1) have provisions in writing covering the operation of late shifts, or (2) have operated late shifts at any time during the 12 months preceding a survey. When establishments have several differentials which vary by job, the differential applying to the majority of the production workers is recorded. When establishments have differentials which apply only to certain hours of work, the differential applying to the most common schedule is recorded.

For purposes of this study, a late shift is either a second (evening) shift which ends at or near midnight or a third (night) shift which starts at or near midnight.

Differentials for second and third shifts are summarized separately for (1) establishment policies (an establishment's differentials are weighted by all production workers in the establishment at the time of the survey) and (2) effective practices (an establishment's differentials are weighted by production workers employed on the specified shift at the time of the survey).

Scheduled weekly hours; paid holidays; paid vacations; insurance, health, and retirement plans; and other selected benefits. Provisions which apply to a majority of the production or office workers in an establishment are considered to apply to all production or office workers in the establishment; a practice or provision is considered nonexistent when it applies to less than a majority. Holidays, vacations, insurance and health plans, and "other selected benefits" (table B-8) are considered applicable to employees currently eligible for the benefits. Retirement plans are considered applicable to employees currently eligible for participation and also to those who will eventually become eligible.

Scheduled weekly hours and days (table B-3). Scheduled weekly hours and days refer to the number of hours and days per week which full-time first (day) shift workers are expected to work, whether paid for at straight- time or overtime rates.

Paid holidays (table B-4). Holidays are included if workers who are not required to work are paid for the time off and those required to work receive premium pay or compensatory time off. They are included only if they are granted annually on a formal basis (provided for in written form or established by custom). Holidays are included even though in a particular year they fall on a nonworkday and employees are not granted another day off. Paid personal holiday provisions, typically found in the automobile and related industries, are included as paid holidays.

Data are tabulated to show the percent of workers who (1) are granted specific numbers of whole and half holidays and (2) are granted specified amounts of total holiday time (whole and half holidays are aggregated).

Paid vacations (table B-5). Establishments report their method of calculating vacation pay (time basis, percent of annual earnings, flat-sum payment, etc.) and the amount of vacation pay granted. Only basic formal plans are reported. Vacation bonuses, vacation-savings plans, and "extended" or "sabbatical" benefits beyond basic plans are excluded.

For tabulating vacation pay granted, all provisions are expressed on a time basis. Vacation pay calculated on other than a time basis is converted to its equivalent time period. Two percent of annual earnings, for example, is tabulated as 1 week's vacation pay.

Also, provisions after each specified length of service are related to all production or office workers in an establishment regardless of length of service. Vacation plans commonly provide for a larger amount of vacation pay as service lengthens. Counts of production or office workers by length of service were not obtained. The tabulations of vacation pay granted present, therefore, statistical measures of these provisions rather than proportions of workers actually receiving specific benefits.

Insurance, health, and retirement plans (table B-6). Insurance, health, and retirement plans include plans for which the employer pays either all or part of the cost. The benefits may be underwritten by an insurance company, paid directly by an employer or union, or provided by a health maintenance organization (HMO). Workers provided the option of an insurance plan or an HMO are reported under both types of plans. A plan is included even though a majority of the employees in an establishment do not choose to participate in it because they are required to bear part of its cost (provided the choice to participate is available to a majority). Legally required plans such as Social Security, railroad retirement, workers' disability compensation, and temporary disability insurance[3] are excluded.

Life insurance includes formal plans providing indemnity (usually through an insurance policy) in case of death of the covered worker.

Accidental death and dismemberment insurance is limited to plans which provide benefit payments in case of death or loss of limb or sight as a direct result of an accident.

Sickness and accident insurance includes only those plans which provide that predetermined cash payments be made directly to employees who lose time from work because of illness or injury, e.g., $50 a week for up to 26 weeks of disability.

Sick leave plans are limited to formal plans[3] which provide for continuing an employee's pay during absence from work because of illness. Data collected distinguish between (1) plans which provide full pay with no waiting period, and (2) plans which either provide partial pay or require a waiting period.

Long-term disability insurance plans provide payments to totally disabled employees upon the expiration of their paid sick leave and/or sickness and accident insurance, or after a predetermined period of disability (typically 6 months). Payments are made until the end of the disability, a maximum age, or eligibility for retirement benefits. Full or partial payments are almost always reduced by Social Security, workers' disability compensation, and private pension benefits payable to the disabled employee.

Hospitalization, surgical, and medical insurance plans provide at least partial payment for: l) Hospital room charges; 2) inpatient surgery; and 3) doctors' fees for hospital, office, or home visits. These plans typically cover other expenses such as outpatient surgery and prescription drugs.

An HMO provides comprehensive medical care in return for pre-established fees. Unlike insurance, HMO's cover routine preventive care as well as care required because of an illness and do not have deductibles or coinsurance (although there may be small fixed copayments for selected services). HMO's may provide services through their own facilities; through contracts with hospitals, physicians, and other providers, such as individual practice associations (IPA's); or through a combination of methods.

Dental care plans provide at least partial payment for routine dental care, such as checkups and cleanings, fillings, and X-rays. Plans which provide benefits only for oral surgery or other dental care required as the result of an accident are not reported.

Vision care plans provide at least partial payment for routine eye examinations, eyeglasses, or both. Plans which provide benefits only for orthoptics or for eyeglasses resulting from an accident are not reported.

Alcohol and drug abuse treatment plans provide at least partial payment for institutional treatment (in a hospital or specialized facility) for addiction to alcohol or drugs.

Hearing care plans provide at least partial payment for hearing examinations, hearing aids, or both.

Retirement pension plans provide for regular payments to the retiree for life. Included are deferred profit-sharing plans which provide the option of purchasing a lifetime annuity. Lump-sum plans are defined as those providing for a single payment at retirement; "other" plans include those providing for a fixed number of payments (more than one) after which payments are discontinued.

Health plan participation (table B-7). Estimates are presented on the percent of production and office workers participating in hospitalization, surgical, and medical insurance, HMO's, dental, vision, alcohol and drug abuse treatment, and hearing plans. When an establishment was unable to supply the number of plan participants, approximations (imputations) were made, where possible, by using information from other establishments offering a similar plan. Imputations were never made for more than one-third of the production or clerical workers in an industry group (all industries, manufacturing, nonmanufacturing, and transportation and utilities); when imputations were made, they were usually for considerably less than one-third of the workers. Participation rates were estimated and published if participant numbers (including imputations) were available for 90 percent or more of the production or office workers in an industry group; consequently, a published estimate may not relate to a group total.

Other selected benefits (table B-8). Information on the incidence of severance pay, supplemental unemployment benefits, cost-of-living adjustments, jury-duty leave, funeral leave, military leave, and personal leave is presented in table B-8.

Severance pay plans provide one or a limited number of payments to employees permanently separated through no fault of their own for such reasons as technological change or closing or scaling down of a plant or department. Excluded are retirement, profit-sharing, or savings plans, or plans limited to workers separated without prior notice.

Supplemental unemployment benefits (SUB) relate to formal plans designed to supplement benefits paid under State unemployment insurance systems.

Cost-of-living adjustments relate to formal plans by which wage rates are adjusted periodically in keeping with changes in the BLS Consumer Price Index or some other measure.

Paid funeral and jury-duty leave[4] data relate to formal plans that provide at least partial payment for time lost as a result of attending funerals of specified family members, or serving as a juror.

Military leave relates to formal plans providing excused absence from work with full or partial pay while on annual training duty. Plans that provide paid leave only for *temporary emergency* duty are excluded.

Paid personal leave plans are designed to allow workers to be absent from work for a variety of personal reasons. Provisions intended for use as (or extension of) paid holidays, vacations, or sick leave are not reported as paid personal leave, but are reported as holidays, vacations, or sick leave in accordance with the intent of the provision.

Footnotes

[1] The Bureau also conducts more limited area studies in over 100 areas at the request of the Employment Standards Administration of the U.S. Department of Labor.

[2] Temporary disability insurance which provides benefits to covered workers disabled by injury or illness which is not work-connected is mandatory under State laws in California, New Jersey, New York, and Rhode Island. Establishment plans which meet only the legal requirements are excluded from these data, but those under which (1) employers contribute more than is legally required or (2) benefits exceed those specified in the State law are included. In Rhode Island, benefits are paid out of a State fund to which only employees contribute. In each of the other three States, benefits are paid either from a State fund or through a private plan.

State fund financing: In California, only employees contribute to the State fund; in New Jersey, employees and employers contribute; in New York, employees contribute up to a specified maximum and employers pay the difference between the employees' share and the total contribution required.

Private plan financing: In California and New Jersey, employees cannot be required to contribute more than they would if they were covered by the State fund; in New York, employees can agree to contribute more if the State rules that the additional contribution is commensurate with the benefit provided.

Federal legislation (Railroad Unemployment Insurance Act) provides temporary disability insurance benefits to railroad workers for illness or injury, whether work-connected or not. The legislation requires that employers bear the entire cost of the insurance.

[3] An establishment is considered as having a formal plan if it specifies at least the minimum number of days of sick leave available to each employee. Such a plan need not be written, but informal sick leave allowances determined on an individual basis are excluded.

[4] When paid jury-duty leave is required by law, as it is in Alabama, Nebraska, Tennessee, and parts of Florida and Massachusetts, plans are included only if the employer provides the employees with benefits exceeding legal requirements.

Appendix table 1. Establishments and workers within scope of survey and number studied in Philadelphia, PA-NJ,[1] November 1988

Industry division[2]	Minimum employment in establishments in scope of survey	Number of establishments		Workers in establishments				
		Within scope of survey[3]	Studied	Within scope of survey				Studied[4]
				Total[5]		Full-time production and related workers	Full-time office workers	
				Number	Percent			
All establishments								
All divisions	–	2,595	300	796,391	100	294,133	145,740	287,530
Manufacturing	100	684	103	253,381	32	137,451	33,641	95,257
Nonmanufacturing	–	1,911	197	543,010	68	156,682	112,099	192,273
Transportation, communication, and other public utilities[6]	100	109	29	81,492	10	37,712	15,740	47,024
Wholesale trade	50	444	25	54,883	7	(*)	(*)	6,429
Retail trade	100	325	29	156,953	20	(*)	(*)	68,238
Finance, insurance, and real estate	50	324	35	118,091	15	(*)	(*)	40,506
Services[7]	50	709	79	131,591	17	(*)	(*)	30,076
Large establishments								
All divisions	–	302	105	456,419	100	134,703	94,324	250,597
Manufacturing	500	94	39	132,862	29	55,842	20,832	79,523
Nonmanufacturing	–	208	66	323,557	71	78,861	73,492	171,074
Transportation, communication, and other public utilities[6]	500	27	12	71,058	16	32,615	13,587	44,106
Wholesale trade	500	24	3	16,342	4	(*)	(*)	3,289
Retail trade	500	51	18	103,319	23	(*)	(*)	65,851
Finance, insurance, and real estate	500	46	14	77,583	17	(*)	(*)	37,502
Services[7]	500	60	19	55,257	12	(*)	(*)	20,326

[1] The Philadelphia, PA-NJ Primary Metropolitan Statistical Area, as defined by the Office of Management and Budget through October 1984, consists of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, PA; and Burlington, Camden, and Gloucester Counties, NJ. The "workers within scope of survey" estimates provide a reasonably accurate description of the size and composition of the labor force included in the survey. Estimates are not intended, however, for comparison with other statistical series to measure employment trends or levels since (1) planning of wage surveys requires establishment data compiled considerably in advance of the payroll period studied, and (2) small establishments are excluded from the scope of the survey.

[2] The 1972 edition of the *Standard Industrial Classification Manual* was used to classify establishments by industry division. All government operations are excluded from the scope of the survey.

[3] Includes all establishments with total employment at or above the minimum limitation. All outlets (within the area) of nonmanufacturing companies are considered as one establishment when located within the same industry division.

[4] Includes executive, professional, part-time, seasonal, and other workers excluded from the separate production and office categories.

[5] Abbreviated to "transportation and utilities" in the A- and B-series tables. Taxicabs and services incidental to water transportation are excluded. Local transit in the city of Philadelphia is governmentally operated and excluded by definition from the scope of the survey.

[6] Separate data for this division are not presented in the A- and B-series tables, but the division is represented in the "all industries" and "nonmanufacturing" estimates.

[7] Hotels and motels; laundries and other personal services; business services; automobile repair, rental, and parking; motion pictures; nonprofit membership organizations (excluding religious and charitable organizations); and engineering and architectural services.

Appendix table 2. Percent of workers covered by labor-management agreements, Philadelphia, PA-NJ, November 1988

Industry division	*Production and related workers*	*Office workers*
All industries	51	10
Manufacturing	68	12
Nonmanufacturing	36	10
Transportation and utilities	79	61

NOTE: An establishment is considered to have a contract covering all production or office workers if a majority of such workers is covered by a labor-management agreement. Therefore, all other production or office workers are employed in establishments that either do not have labor-management contracts in effect, or have contracts that apply to fewer than half of their production or office workers. Estimates are not necessarily representative of the extent to which all workers in the area may be covered by the provisions of labor-management agreements, because small establishments are excluded and the industrial scope of the survey is limited.

Appendix table 3. Industrial composition in manufacturing, Philadelphia, PA-NJ, November 1988

(Percent of all manufacturing workers)

Food and kindred products	14
Bakery products	7
Chemicals and allied products	11
Drugs	6
Electric and electronic equipment	11
Communication equipment	5
Transportation equipment	10
Printing and publishing	9
Machinery, except electrical	8
Fabricated metal products	6
Apparel and other textile products	5
Paper and allied products	5

NOTE: This information is based on estimates of total employment derived from universe materials compiled before actual survey.

Appendix B. Occupational Descriptions

The primary purpose of preparing job descriptions for the Bureau's wage surveys is to assist its field representatives in classifying into appropriate occupations workers who are employed under a variety of payroll titles and different work arrangements from establishment to establishment and from area to area. This permits grouping of occupational wage rates representing comparable job content. Because of this emphasis on comparability of occupational content, the Bureau's job descriptions may differ significantly from those in use in individual establishments or those prepared for other purposes. In applying these job descriptions, the Bureau's field representatives are instructed to exclude working supervisors; apprentices; and part-time, temporary, and probationary workers. Handicapped workers whose earnings are reduced because of their handicap are also excluded. Learners, beginners, and trainees, unless specifically included in the job description, are excluded.

Listed below are three occupations for which new or revised descriptions or titles are being introduced in this survey:

Computer systems analyst
Computer programmer
Computer operator

In addition, the maintenance, toolroom, and powerplant descriptions have been modified so that workers performing maintenance services for establishments other than their employing establishment are not automatically excluded.

The titles and numerical codes below the job titles in this appendix are taken from the 1980 edition of the *Standard Occupational Classification Manual* (SOC), issued by the U.S. Department of Commerce, Office of Federal Statistical Policy and Standards.

In general, the Bureau of Labor Statistics' occupational descriptions are much more specific than those found in the SOC manual. The BLS occupation, "Registered Industrial Nurse," for example, is limited to workers providing medical assistance and other related services (e.g., health education) to persons who are ill or become ill or suffer an injury in a factory or other establishment. The SOC occupation (code 29) includes a variety of registered nurses (e.g., school nurse, head nurse, general duty nurse, private duty nurse) that are excluded from the BLS description.

Thus, in comparing the results of this survey with other sources, factors such as differences in occupational definitions and survey scope should be taken into consideration.

Office

SECRETARY

(4622: Secretary)

Provides principal secretarial support in an office, usually to one individual, and, in some cases, also to the subordinate staff of that individual. Maintains a close and highly responsive relationship to the day-to-day activities of the supervisor and staff. Works fairly independently, receiving a minimum of detailed supervision and guidance. Performs varied clerical and secretarial duties requiring a knowledge of office routine and an understanding of the organization, programs, and procedures related to the work of the office.

Exclusions. Not all positions that are titled "secretary" possess the above characteristics. Examples of positions which are excluded from the definition are as follows:

a. Clerks or secretaries working under the direction of secretaries or administrative assistants as described in e;

b. Stenographers not fully performing secretarial duties;

c. Stenographers or secretaries assigned to two or more professional, technical, or managerial persons of equivalent rank;

d. Assistants or secretaries performing any kind of technical work, e.g., personnel, accounting, or legal work;

e. Administrative assistants or supervisors performing duties which are more difficult or more responsible than the secretarial work described in LR-1 through LR-4;

f. Secretaries receiving additional pay primarily for maintaining confidentiality of payroll records or other sensitive information;

g. Secretaries performing routine receptionist, typing, and filing duties following detailed instructions and guidelines; these duties are less responsible than those described in LR-1 below;

h. Trainees.

Classification by level. Secretary jobs which meet the required characteristics are matched at one of five levels according to two factors: (a) Level of the secretary's supervisor within the overall organizational structure, and (b) level of the secretary's responsibility. The table following the explanations of these factors indicates the level of the secretary for each combination of factors.

Level of Secretary's Supervisor (LS)

Secretaries should be matched at one of the three LS levels below best describing the organization of the secretary's supervisor.

LS-1

Organizational structure is not complex and internal procedures and administrative controls are simple and informal; supervisor directs staff through face-to-face meetings.

LS-2

Organizational structure is complex and is divided into subordinate groups that usually differ from each other as to subject matter, function, etc.; supervisor usually directs staff through intermediate supervisors; internal procedures and administrative controls are formal. An entire organization (e.g., division, subsidiary, or parent organization) may contain a variety of subordinate groups which meet the LS-2 definition. Therefore, it is not unusual for one LS-2 supervisor to report to another LS-2 supervisor.

The presence of subordinate supervisors does not by itself mean LS-2 applies, e.g., a clerical processing organization divided into several units, each performing very similar work, is placed in LS-1.

In smaller organizations or industries such as retail trade, with relatively few organizational levels, the supervisor may have an impact on the policies and major programs of the entire organization, and may deal with important outside contacts, as described in LS-3.

LS-3

Organizational structure is divided into two or more subordinate supervisory levels (of which at least one is a managerial level) with several subdivisions at each level. Executive's program(s) are usually interlocked on a direct and continuing basis with other major organizational segments, requiring constant attention to extensive formal coordination, clearances, and procedural controls. Executive typically has: Financial decisionmaking authority for assigned program(s); considerable impact on the entire organization's financial position or image; and responsibility for, or has staff specialists in, such areas as personnel and administration for assigned organization. Executive plays an important role in determining the policies and major programs of the entire organization, and spends considerable time dealing with outside parties actively interested in assigned program(s) and current or controversial issues.

Level of Secretary's Responsibility (LR)

This factor evaluates the nature of the work relationship between the secretary and the supervisor or staff, and the extent to which the secretary is expected to exercise initiative and judgment. Secretaries should be matched at the level best describing their level of responsibility. When a position's duties span more than one LR level, the introductory paragraph at the beginning of each LR level should be used to determine which of the levels best matches the position. (Typically, secretaries performing at the higher levels of responsibility also perform duties described at the lower levels.)

LR-1

Carries out recurring office procedures independently. Selects the guideline or reference which fits the specific case. Supervisor provides specific instructions on new assignments and checks completed work for accuracy. Performs varied duties including or comparable to the following:

a. Responds to routine telephone requests which have standard answers; refers calls and visitors to appropriate staff. Controls mail and assures timely staff response; may send form letters;
b. As instructed, maintains supervisor's calendar, makes appointments, and arranges for meeting rooms;
c. Reviews materials prepared for supervisor's approval for typographical accuracy and proper format;
d. Maintains recurring internal reports, such as: Time and leave records, office equipment listings, correspondence controls, training plans, etc.;
e. Requisitions supplies, printing, maintenance, or other services. Types, takes and transcribes dictation, and establishes and maintains office files.

LR-2

Handles differing situations, problems, and deviations in the work of the office according to the supervisor's general instructions, priorities, duties, policies, and program goals. Supervisor may assist secretary with special assignments. Duties include or are comparable to the following:

a. Screens telephone calls, visitors, and incoming correspondence; personally responds to requests for information concerning office procedures; determines which requests should be handled by the supervisor, appropriate staff member, or other offices. May prepare and sign routine, nontechnical correspondence in own or supervisor's name;
b. Schedules tentative appointments without prior clearance. Makes arrangements for conferences and meetings and assembles established background materials, as directed. May attend meetings and record and report on the proceedings;
c. Reviews outgoing materials and correspondence for internal consistency and conformance with supervisor's procedures; assures that proper clearances have been obtained, when needed;
d. Collects information from the files or staff for routine inquiries on office program(s) or periodic reports. Refers nonroutine requests to supervisor or staff;
e. Explains to subordinate staff supervisor's requirements concerning office procedures. Coordinates personnel and administrative forms for the office and forwards for processing.

LR-3

Uses greater judgment and initiative to determine the approach or action to take in nonroutine situations. Interprets and adapts guidelines, including unwritten policies, precedents, and practices, which are not always completely applicable to changing situations. Duties include or are comparable to the following:

a. Based on a knowledge of the supervisor's views, composes correspondence on own initiative about administrative matters and general office policies for supervisor's approval;
b. Anticipates and prepares materials needed by the supervisor for conferences, correspondence, appointments, meetings, telephone calls, etc;, and informs supervisor on matters to be considered;
c. Reads publications, regulations, and directives and takes action or refers those that are important to the supervisor and staff;
d. Prepares special or one-time reports, summaries, or replies to inquiries, selecting relevant information from a variety of sources such as reports, documents, correspondence, other offices, etc., under general direction;
e. Advises secretaries in subordinate offices on new procedures; requests information needed from the subordinate office(s) for periodic or special conferences, reports, inquiries, etc. Shifts clerical staff to accommodate workload needs.

LR-4

Handles a wide variety of situations and conflicts involving the clerical or administrative functions of the office which often cannot be brought to the attention of the executive. The executive sets the overall objectives of the work. Secretary may participate in developing the work deadlines. Duties include or are comparable to the following:

a. Composes correspondence requiring some understanding of technical matters; may sign for executive when technical or policy content has been authorized;
b. Notes commitments made by executive during meetings and arranges for staff implementation. On own initiative, arranges for staff member to represent organization at conferences and meetings, establishes appointment priorities, or reschedules or refuses appointments or invitations;
c. Reads outgoing correspondence for executive's approval and alerts writers to any conflict with the file or departure from policies or executive's viewpoints; gives advice to resolve the problems;
d. Summarizes the content of incoming materials, specially gathered information, or meetings to assist executive; coordinates the new information with background office sources; draws attention to important parts or conflicts;
e. In the executive's absence, ensures that requests for action or information are relayed to the appropriate staff member; as needed, interprets request and helps implement action; makes sure that information is furnished in timely manner; decides whether executive should be notified of important or emergency matters.

Exclude secretaries performing any of the following duties:

Acts as office manager for the executive's organization, e.g., determines when new procedures are needed for changing situations and devises and implements alternatives; revises or clarifies procedures to eliminate conflict or duplication; identifies and resolves various problems that affect the orderly flow of work in transactions with parties outside the organization.

Prepares agenda for conferences; explains discussion topics to participants; drafts introductions and develops background information and prepares outlines for executive or staff member(s) to use in writing speeches.

Advises individuals outside the organization on the executive's views on major policies or current issues facing the organization; contacts or responds to contacts from high-ranking outside officials (e.g., city or State officials, members of Congress, presidents of national unions or large national or international firms, etc.) in unique situations. These officials may be relatively inaccessible, and each contact typically must be handled differently, using judgment and discretion.

Criteria For Matching Secretaries By Level

Level of Secretary's Supervisor	Level of Secretary's Responsibility			
	LR-1	LR-2	LR-3	LR-4
LS-1	I	II	III	IV
LS-2	I	III	IV	V
LS-3	I	IV	V	V

STENOGRAPHER

(4623: Stenographer)

Primary duty is to take dictation using shorthand, and to transcribe the dictation. May also type from written copy. May operate from a stenographic pool. May occasionally transcribe from voice recordings.

Excluded from this definition are:

a. Trainee positions not requiring a fully qualified stenographer;
b. Secretaries providing the principal secretarial support in an office and performing more responsible and discretionary tasks, as described in LR-1 through LR-4 in the secretary definition above;
c. Stenographers who take dictation involving the frequent use of a wide variety of technical or specialized vocabulary. Typically this kind of vocabulary cannot be learned in a relatively short period of time, e.g., a month or two;
d. Stenographers, such as shorthand reporters, who record material verbatim at hearings, conferences, or similar proceedings.

Stenographer I

Takes and transcribes dictation, receiving specific assignments along with detailed instructions on such requirements as form and presentation. The transcribed material is typically reviewed in rough draft, and the final transcription is reviewed for conformance with the rough draft. May maintain files, keep simple records, or perform other relatively routine clerical tasks.

Stenographer II

Takes and transcribes dictation determining the most appropriate format. Performs stenographic duties requiring significantly greater independence and responsibility than Stenographer I. Supervisor typically provides general instructions. Work requires a thorough working knowledge of general business and office procedures and of the specific business operations, organizations, policies, procedures, files, workflow, etc. Uses this knowledge in performing stenographic duties and responsible clerical tasks such as maintaining follow-up files; assembling material for reports, memoranda, and letters; composing simple letters from general instructions; reading and routing incoming mail; answering routine questions, etc.

TYPIST

(4624: Typist)

Uses a manual, electric, or automatic typewriter to type various materials. Included are automatic typewriters that are used only to record text and update and reproduce previously typed items from magnetic cards or tape. May include typing of stencils, mats, or similar materials for use in duplicating processes. May do clerical work involving little special training, such as keeping simple records, filing records and reports, or sorting and distributing incoming mail.

Excluded from this definition is work that involves:

a. Typing directly from spoken material that has been recorded on disks, cylinders, belts, tapes, or other similar media;
b. The use of varitype machines, composing equipment, or automatic equipment in preparing material for printing; and
c. Familiarity with specialized terminology in various keyboard commands to manipulate or edit the recorded text to accomplish revisions, or to perform tasks such as extracting and listing items from the text, or transmitting text to other terminals, or using "sort" commands to have the machine reorder material. Typically requires the use of automatic equipment which may be either computer linked or have a programmable memory so that material can be organized in regularly used formats or preformed paragraphs which can then be coded and stored for future use in letters or documents.

Typist I

Performs *one or more of the following:* Copy typing from rough or clear drafts; or routine typing of forms, insurance policies, etc.; or setting up simple standard tabulations; or copying more complex tables already set up and spaced properly.

Typist II

Performs *one or more of the following:* Typing material in final form when it involves combining material from several sources; or responsibility for correct spelling, syllabication, punctuation, etc., of technical or unusual words or foreign language material; or planning layout and typing of complicated statistical tables to maintain uniformity and balance in spacing. May type routine form letters, varying details to suit circumstances.

WORD PROCESSOR

(4624: Typist)

Primary duty is to operate word-processing equipment to enter, store, retrieve, change, and present text or tabulations. Produces a variety of printed copy such as letters, documents, or reports. May enter regularly used formats or stored paragraphs that are organized and coded for future use. Recorded texts can be changed by rearranging paragraphs, replacing words, shifting lines, etc.

(Word-processing equipment typically has a full- or partial-page video-display screen (CRT) and a separate printer. The equipment may be integrated with a digital computer, have telecommunications capabilities, and also have capabilities for adding to or upgrading features. Automatic or electronic typewriters with limited text-editing capabilities, and often with single-line electronic display "windows," are not considered word-processing equipment.)

Excluded from this definition are:

a. Workers whose primary function is to enter a data base for purposes other than composition (see key entry operator);
b. Workers who use equipment and data base for purposes such as accounting, inventory control, sales, or original writing and editing;

c. Workers responsible for preparation of published reports, including page layout or selection of different type sizes.

Positions are classified into levels on the basis of the following definitions:

Word Processor I

Performs tasks requiring a knowledge of the word-processing equipment and familiarity with the formats and forms used in the establishment. Proficiency in grammar, spelling, and punctuation is also required to produce printed materials accurately. May refer problems to supervisor or higher level processor, or refer to operating manual.

Word Processor II

Work at this level requires considerable classroom or on-the-job training and may involve working directly with task originator rather than through supervisor. In addition to work assignments described for level I, duties include *one or more of the following:*

a. Uses the more sophisticated features of the equipment to carry out complex assignments, such as sorting, merging, and organizing text, or maintaining files;
b. Applies knowledge of specialized terminology or foreign language;
c. Tests new applications and procedures; or
d. Trains lower level processors.

KEY ENTRY OPERATOR

(4793: Data entry keyer)

Operates keyboard-controlled data entry device such as keypunch machine or key-operated magnetic tape or disk encoder to transcribe data into a form suitable for computer processing. Work requires skill in operating an alphanumeric keyboard and an understanding of transcribing procedures and relevant data entry equipment.

Positions are classified into levels on the basis of the following definitions:

Key Entry Operator I

Work is routine and repetitive. Under close supervision or following specific procedures or detailed instructions, works from various standardized source documents which have been coded and require little or no selecting, coding, or interpreting of data to be entered. Refers to supervisor problems arising from erroneous items, codes, or missing information.

Key Entry Operator II

Work requires the application of experience and judgment in selecting procedures to be followed and in searching for, interpreting, selecting, or coding items to be entered from a variety of source documents. On occasion may also perform routine work as described for level I.

NOTE: Excluded are operators above level II using the key entry controls to access, read, and evaluate the substance of specific records to take substantive actions, or to make entries requiring a similar level of knowledge.

ACCOUNTING CLERK

(4712: Bookkeeper and accounting and auditing clerk)

Performs one or more accounting tasks such as posting to registers and ledgers; balancing and reconciling accounts; verifying the internal consistency, completeness, and mathematical accuracy of accounting documents; assigning prescribed accounting distribution codes; examining and verifying the clerical accuracy of various types of reports, lists, calculations, postings, etc.; preparing journal vouchers; or making entries or adjustments to accounts.

Levels I and II require a basic knowledge of routine clerical methods and office practices and procedures as they relate to the clerical processing and recording of transactions and accounting information. Levels III and IV require a knowledge and understanding of the established and standardized bookkeeping and accounting procedures and techniques used in an accounting system, or a segment of an accounting system, where there are few variations in the types of transactions handled. In addition, some jobs at each level may require a basic knowledge and understanding of the terminology, codes, and processes used in an automated accounting system.

Accounting Clerk I

Performs very simple and routine accounting clerical operations, for example, recognizing and comparing easily identified numbers and codes on similar and repetitive accounting documents, verifying mathematical accuracy, and identifying discrepancies and bringing them to the supervisor's attention. Supervisor gives clear and detailed instructions for specific assignments. Employee refers to supervisor all matters not covered by instructions. Work is closely controlled and reviewed in detail for accuracy, adequacy, and adherence to instructions.

Accounting Clerk II

Performs one or more routine accounting clerical operations, such as: Examining, verifying, and correcting accounting transactions to ensure completeness and accuracy of data and proper identification of accounts, and checking that expenditures will not exceed obligations in specified accounts; totaling, balancing, and reconciling collection vouchers; posting data to transaction sheets where employee identifies proper accounts and items to be posted; and coding documents in accordance with a chart (listing) of accounts. Employee follows specific and detailed accounting procedures. Completed work is reviewed for accuracy and compliance with procedures.

Accounting Clerk III

Uses a knowledge of double entry bookkeeping in performing one or more of the following: Posts actions to journals, identifying subsidiary accounts affected and debit and credit entries to be made and assigning proper codes; reviews computer printouts against manually maintained journals, detecting and correcting erroneous postings, and preparing documents to adjust accounting classifications and other data; or reviews lists of transactions rejected by an automated system, determining reasons for rejections, and preparing necessary correcting material. On routine assignments, employee selects and applies established procedures and techniques. Detailed instructions are provided for difficult or unusual assignments. Completed work and methods used are reviewed for technical accuracy.

Accounting Clerk IV

Maintains journals or subsidiary ledgers of an accounting system and balances and reconciles accounts. Typical duties include one or both of the following: Reviews invoices and statements (verifying information, ensuring sufficient funds have been obligated, and if questionable, resolving with the submitting unit, determining accounts involved, coding transactions, and processing material through data processing for application in the accounting system); and/or analyzes and reconciles computer printouts with operating unit reports (contacting units and researching causes of discrepancies, and taking action to ensure that accounts balance). Employee resolves problems in recurring assignments in accordance with previous training and experience. Supervisor provides suggestions for handling unusual or nonrecurring transactions. Conformance with requirements and technical soundness of completed work are reviewed by the supervisor or are controlled by mechanisms built into the accounting system.

NOTE: Excluded from level IV are positions responsible for maintaining either a general ledger or a general ledger in combination with subsidiary accounts.

PAYROLL CLERK

(4713: Payroll and timekeeping clerk)

Performs the clerical tasks necessary to process payrolls and to maintain payroll records. Work involves *most of the following*: Processing workers' time or production records; adjusting workers' records for changes in wage rates, supplementary benefits, or tax deductions; editing payroll listings against source records; tracing and correcting errors in listings; and assisting in preparation of periodic summary payroll reports. In a nonautomated payroll system, computes wages. Work may require a practical knowledge of governmental regulations, company payroll policy, or the computer system for processing payrolls.

FILE CLERK

(4696: File clerk)

Files, classifies, and retrieves material in an established filing system. May perform clerical and manual tasks required to maintain files. Positions are classified into levels on the basis of the following definitions:

File Clerk I

Performs routine filing of material that has already been classified or which is easily classified in a simple serial classification system (e.g., alphabetical, chronological, or numerical). As requested, locates readily available material in files and forwards material; and may fill out withdrawal charge. May perform simple clerical and manual tasks required to maintain and service files.

File Clerk II

Sorts, codes, and files unclassified material by simple (subject matter) headings or partly classified material by finer subheadings. Prepares simple related index and cross-reference aids. As requested, locates clearly identified material in files and forwards material. May perform related clerical tasks required to maintain and service files.

File Clerk III

Classifies and indexes file material such as correspondence, reports, technical documents, etc., in an established filing system containing a number of varied subject matter files. May also file this material. May keep records of various types in conjunction with the files. May lead a small group of lower level file clerks.

MESSENGER

(4745: Messenger)

Performs various routine duties such as running errands, operating minor office machines such as sealers or mailers, opening mail, distributing mail on a regularly scheduled route or in a familiar area, and other minor clerical work. May deliver mail that requires some special handling, e.g., mail that is insured, registered, or marked for special delivery.

Excluded are positions which include any of the following as significant duties:

a. Operating motor vehicles;
b. Delivering valuables or security-classified mail when the work requires a continuing knowledge of special procedures for handling such items;
c. Weighing mail, determining postage, or recording and controlling registered, insured, and certified mail in the mail room;
d. Making deliveries to unfamiliar or widely separated buildings or points which are not part of an established route; or
e. Directing other workers.

ORDER CLERK

(4664: Order clerk)

Receives written or verbal customers' purchase orders for material or merchandise from customers or sales people. Work typically involves some combination of the following duties: Quoting prices; determining availability of ordered items and suggesting substitutes when necessary; advising expected delivery date and method of delivery; recording order and customer information on order sheets; checking order sheets for accuracy and adequacy of information recorded; ascertaining credit rating of customer; furnishing customer with acknowledgment of receipt of order; following up to see that order is delivered by the specified date or to let customer know of a delay in delivery; maintaining order file; checking shipping invoice against original order. *Exclude workers paid on a commission basis or whose duties include any of the following:* Receiving orders for services rather than for material or merchandise; providing customers with consultative advice using knowledge gained from engineering or extensive technical training; emphasizing selling skills; handling material or merchandise as an integral part of the job.

Positions are classified into levels according to the following definitions:

Order Clerk I

Handles orders involving items which have readily identified uses and applications. May refer to a catalog, manufacturer's manual, or similar document to insure that proper item is supplied or to verify price of ordered item.

Order Clerk II

Handles orders that involve making judgments such as choosing which specific product or material from the establishment's product lines will satisfy the customer's needs, or determining the price to be quoted when pricing involves more than merely referring to a price list or making some simple mathematical calculations.

RECEPTIONIST
(4645: Receptionist)

Greets visitors, determines nature of visits, and directs visitors to appropriate persons. Receptionist duties may also include providing information, making appointments, answering a telephone (other than switchboard or console), keeping a log of visitors, and issuing visitor passes. May also perform typing or other routine clerical duties which may occupy a major portion of time, and are usually performed at the reception desk.

This classification excludes workers operating a telephone switchboard or console, performing guard duties, or performing more difficult clerical duties.

SWITCHBOARD OPERATOR
(4732: Telephone operator)

Operates a telephone switchboard or console used with a private branch exchange (PBX) system to relay incoming, outgoing, and intrasystem calls. May provide information to callers, record and transmit messages, keep record of calls placed and toll charges. Besides operating a telephone switchboard or console, may also type or perform routine clerical work (typing or routine clerical work may occupy the major portion of the worker's time, and is usually performed while at the switchboard or console). Chief or lead operators in establishments employing more than one operator are excluded. For an operator who also acts as a receptionist, see Switchboard operator-receptionist.

SWITCHBOARD OPERATOR-RECEPTIONIST
(4645: Receptionist)

At a single-position telephone switchboard or console, acts both as an operator—see Switchboard operator—and as a receptionist. Receptionist's work involves such duties as greeting visitors; determining nature of visitor's business and providing appropriate information; referring visitor to appropriate person in the organization or contacting that person by telephone and arranging an appointment; keeping a log of visitors.

Professional and Technical

NOTE: The following descriptions for computer systems analysts, programmers, and operators are derived from job descriptions developed for the National Survey of Professional, Administrative, Technical, and Clerical Pay (PATC). For the most part, they are comparable to the PATC descriptions for systems analysts and programmers levels I to IV and computer operators levels I to III. The level IV computer operator description is comparable to the combined levels IV, V, and VI PATC descriptions.

COMPUTER SYSTEMS ANALYST
(171:Computer systems analyst)

Analyzes business or scientific problems for resolution through electronic data processing. Gathers information from users, defines work problems, designs a system of computer programs and procedures to resolve the problems, and develops complete specifications (precise descriptions) to enable computer programmers to prepare required programs. May write the computer programs.

NOTE: Workers performing both systems analysis and programming should be classified as systems analysts if this is the skill used to determine their pay.

Excluded are:

a. Trainees who receive detailed directives and work plans, select authorized procedures for use in specific situations, and seek assistance for deviations and problems;
b. Positions which require a bachelor's degree in a specific scientific field (other than computer science); however, positions are potential matches where the required degree may be from any of several possible scientific fields;
c. Workers who primarily analyze and evaluate problems concerning computer equipment or its selection or utilization;
d. Computer systems analysts dealing primarily with system software which provides basic services for processing other work; however, positions matching this definition may develop a "total package" which includes not only analyzing work problems to be processed but also selecting the computer equipment and system software;
e. Top technical experts above level IV who develop broad unprecedented computer systems and/or conduct critical studies central to the success of large organizations having extensive technical or highly diversified computer requirements; and
f. Supervisors responsible for, or participating in hiring, firing, curtailing projects, reorganizing, or reallocating resources.

Positions are classified into levels on the basis of the following definitions:

Computer Systems Analyst I

Initial assignments are designed to expand practical experience in applying systems analysis techniques and procedures. Works independently carrying out factfinding and analysis of a single activity or routine problem. Applies established procedures where nature of system, feasibility, computer equipment, and programming language have already been decided. Adapts guides to specific situations. May solve routine user problems by modifying the existing system following clear precedents.

Supervisor defines objectives, priorities, and deadlines. Obtains advice where precedents are unclear or not available.

May direct technicians and others who assist in specific assignments.

Computer Systems Analyst II

Works independently developing or modifying a system of several varied sequences or formats where the nature of the system is predetermined. Recognizes probable interaction of related computer systems and predicts impact of a change in assigned system.

Typical duties include reviewing project proposals; gathering facts; analyzing data, preparing project synopses comparing alternatives; preparing specifications for programs; resolving processing problems; coordinating work with programmers; and orienting users.

Work requires competence in most phases of systems analysis and knowledge of system software and work processes.

May direct lower level analysts on assigned work. *OR*

Works on a segment of a complex data processing system as described for level III. Works independently on routine assignments and receives instruction and guidance on complex assignments.

Computer Systems Analyst III

Works independently maintaining and modifying complex systems or developing new subsystems. Systems typically input data from diverse sources and have multiple users.

Typical duties include guiding users in formulating requirements; analyzing project proposals; arbitrating conflicts between users; recommending optimum approach; and developing systems design. May serve as lead analyst directing and integrating the work of one or two lower level analysts.

Computer Systems Analyst IV

As a team or project leader, provides complete systems design in a highly complex area. The systems design establishes the framework from feasibility studies to post-implementation evaluation. May serve as the technical authority for a design area. At least one team member performs work at level III. *AND/OR*

As a staff specialist or consultant, resolves unique and unyielding systems problems using new technology. May be assisted on project by other analysts or technicians.

COMPUTER PROGRAMMER

(397:Programmer)

Converts specifications (precise descriptions) of business or scientific problems into a sequence of detailed instructions to solve the problems by digital computer. Draws program flow charts to describe the processing of data and develops the precise steps and processing logic which, when entered into the computer in coded language, cause the manipulation of data to achieve desired results. Tests and corrects programs and prepares instructions for operators who control the computer during production runs. Modifies programs to increase operating efficiency or to respond to changes in work processes; maintains records to document program development and revisions.

NOTE: Workers performing both systems analysis and programming should be classified as systems analysts if this is the skill used to determine their pay.

Excluded are:

a. Positions which require a bachelor's degree in a specific scientific field (other than computer science); however, positions are potential matches where the required degree may be from any of several possible scientific fields;

b. Workers who primarily analyze and evaluate problems concerning computer equipment or its selection or utilization;

c. Computer programmers (e.g., systems programmers) dealing primarily with system software which provides basic services for processing other work; however, positions matching this definition may develop a "total package" which includes not only analyzing work problems to be processed but also selecting the computer equipment and system software;

d. Employees with significant responsibility for supervising workers other than programmers or functions other than computer programming;

e. Supervisors responsible for, or participating in hiring, firing, curtailing projects, reorganizing, or reallocating resources; and

f. Team leaders and consultants above level IV who define highly complex programming problems and direct the development of computer programs for their solution, *AND/OR*

Team leaders and consultants who design improvements for highly complex programming problems where few precedents exist.

Positions are classified into levels on the basis of the following definitions:

Computer Programmer I

Receives classroom and/or on-the-job training in computer programming concepts and requirements of the subject-matter field. Performs elementary programming tasks such as drawing flow charts, writing operator instructions, or coding and testing simple programs.

Detailed step-by-step instructions are given; work is closely monitored in progress and reviewed in detail upon completion. Deviations must be authorized by supervisor.

May perform routine programming tasks as described in level II under close supervision. Also may perform elementary factfinding concerning a specific work process.

Computer Programmer II

Maintains and modifies routine programs. Work progresses from initial assignments designed to develop competence to work requiring a knowledge of established procedures and data processing requirements. Typical tasks include amending flow charts; coding, testing, and documenting changes; and writing routine new programs.

May evaluate simple interrelationships in programs and obtain information from users to modify routine programs.

Assignments have clear-cut and complete specifications and the format of the final product is very similar to that of the inputs. Work is monitored in progress and reviewed upon completion.

Computer Programmer III

As a fully qualified computer programmer, develops, modifies, and maintains conventional programs. Uses standard procedures and detailed specifications to independently devise program logic (may include translating mathematical notation), modify interrelationship of files and records, diagnose and correct errors, test and document work, and write computer operator instructions. The programs developed are typically linked to several other programs, with a variety of input records and varied formats produced in the output.

In addition, may analyze a single activity or routine problem when the nature of the programs, feasibility, and type of computer language and equipment have already been determined. Completed work is reviewed for conformance to standards, timeliness, and efficiency. May also guide or instruct lower level programmers, technicians, and others who assist on assignments. *OR*

Under close supervision, works on complex programs as described in level IV.

Computer Programmer IV

As an expert programmer, independently develops, modifies, and maintains complex programs which produce several interrelated but different products. Programs use data from diverse sources and have multiple users. Tests, documents, and writes operating instructions for all work.

May perform programming analysis such as investigating the feasibility of developing alternate programs, assisting users in defining needs, or participating on an EDP and user team working on large and complicated programs.

Completed work is reviewed for timeliness, compatibility with other work, and effectiveness in meeting requirements. May function as team leader of a few lower level programmers or technicians on assigned work.

COMPUTER OPERATOR

(4612:Computer operator)

Monitors and operates the control console of either a main-frame digital computer or a group of mini-computers, in accordance with operating instructions, to process data. Work is characterized by the following:

- Studies operating instructions to determine equipment setup needed;
- Loads equipment with required items (tapes, cards, paper, etc.);
- Switches necessary auxiliary equipment into system;
- Starts and operates console;
- Diagnoses and corrects equipment malfunctions;
- Reviews error messages and makes corrections during operation or refers problems;
- Maintains operating record.

May test run new or modified programs and assist in modifying systems or programs. Included within the scope of this definition are fully qualified computer operators, trainees working to become fully qualified operators, and lead operators providing technical assistance to lower level positions.

Excluded are:

a. Workers operating small computer systems where there is little or no opportunity for operator intervention in program processing and few requirements to correct equipment malfunctions;
b. Peripheral equipment operators and remote terminal or computer operators who do not run the control console of either a main-frame digital computer or a group of mini-computers (see peripheral equipment operator); and
c. Workers using the computer for scientific, technical, or mathematical work when a knowledge of the subject matter is required.

Positions are classified into levels on the basis of the following definitions:

Computer Operator I

Receives on-the-job training in operating the control console (sometimes augmented by classroom training). Works under close personal supervision and is provided detailed written or oral guidance before and during assignments. As instructed, resolves common operating problems. May serve as an assistant operator working under close supervision or performing a portion of a more senior operator's work.

Computer Operator II

Processes scheduled routines which present few difficult operating problems (e.g., infrequent or easily resolved error conditions). In response to computer output instructions or error conditions, applies standard operating or corrective procedure. Refers problems which do not respond to preplanned procedure. May serve as an assistant operator, working under general supervision.

Computer Operator III

Processes a range of scheduled routines. In addition to operating the system and resolving common error conditions, diagnoses and acts on machine stoppage and error conditions not fully covered by existing procedures and guidelines (e.g., resetting switches and other controls or making mechanical adjustments to maintain or restore equipment operations). In response to computer output instructions or error conditions, may deviate from standard procedures if standard procedures do not provide a solution. Refers problems which do not respond to corrective procedures.

Computer Operator IV

Resolves a variety of nonstandard problems (e.g., frequent new programs, applications, and procedures). Problems may require unusual equipment connections and channel configurations. May also provide technical assistance to lower level operators and use knowledge of program languages, computer features, and software systems in assisting programmers, systems analysts, and other users in resolving problems. Completed work is usually submitted to users without supervisory review.

PERIPHERAL EQUIPMENT OPERATOR

(4613: Peripheral equipment operator)

Operates peripheral equipment which directly supports digital computer operations. Such equipment is uniquely and specifically designed for computer applications, but need not be physically or electronically connected to a computer. Printers, plotters, card read/punches, tape readers, tape units or drives, disk units or drives, and data display units are examples of such equipment.

The following duties characterize the work of a peripheral equipment operator:

a. Loading printers and plotters with correct paper; adjusting controls for forms, thickness, tension, printing density, and location; and unloading hard copy;
b. Labeling tape reels, disks, or card decks;
c. Checking labels and mounting and dismounting designated tape reels or disks on specified units or drives;
d. Setting controls which regulate operation of the equipment;
e. Observing panel lights for warnings and error indications and taking appropriate action;
f. Examining tapes, cards, or other material for creases, tears, or other defects which could cause processing problems.

This classification excludes workers (1) who monitor and operate a control console (see Computer operator) or a remote terminal, or (2) whose duties are limited to operating decollaters, bursters, separators, or similar equipment.

COMPUTER DATA LIBRARIAN

(4696: File clerk)

(4754: Stock and inventory clerk)

Maintains library of media (tapes, disks, cards, cassettes) used for automatic data processing applications. The following or similar duties characterize the work of a computer data librarian: Classifying, cataloging, and storing media in accordance with a standardized system; upon proper requests, releasing media for processing; maintaining records of releases and returns; inspecting returned media for damage or excessive wear to determine whether or not they need replacing. May perform minor repairs to damaged tapes.

DRAFTER

(372: Drafting occupation)

Performs drafting work requiring knowledge and skill in drafting methods, procedures, and techniques. Prepares drawings of structures, mechanical and electrical equipment, piping and duct systems and other similar equipment, systems, and assemblies. Uses recognized systems of symbols, legends, shadings, and lines having specific meanings in drawings. Drawings are used to communicate engineering ideas, designs, and information in support of engineering functions.

The following are excluded when they constitute the primary purpose of the job:

a. Design work requiring the technical knowledge, skill, and ability to conceive or originate designs;
b. Illustrating work requiring artistic ability;
c. Work involving the preparation of charts, diagrams, room arrangements, floor plans, etc.;
d. Cartographic work involving the preparation of maps or plats and related materials, and drawings of geological structures; and
e. Supervisory work involving the management of a drafting program or the supervision of drafters.

Positions are classified into levels on the basis of the following definitions:

Drafter I

Working under close supervision, traces or copies finished drawings, making clearly indicated revisions. Uses appropriate templates to draw curved lines. Assignments are designed to develop increasing skill in various drafting techniques. Work is spot-checked during progress and reviewed upon completion.

NOTE: Exclude drafters performing elementary tasks while receiving training in the most basic drafting methods.

Drafter II

Prepares drawings of simple, easily visualized parts of equipment from sketches or marked-up prints. Selects appropriate templates and other equipment needed to complete assignments. Drawings fit familiar patterns and present few technical problems. Supervisor provides detailed instructions on new assignments, gives guidance when questions arise, and reviews completed work for accuracy.

Drafter III

Prepares various drawings of parts and assemblies, including sectional profiles, irregular or reverse curves, hidden lines, and small or intricate details. Work requires use of most of the conventional drafting techniques and a working knowledge of the terms and procedures of the industry. Familiar or recurring work is assigned in general terms; unfamiliar assignments include information on methods, procedures, sources of information, and precedents to be followed. Simple revisions to existing drawings may be assigned with a verbal explanation of the desired results; more complex revisions are produced from sketches which clearly depict the desired product.

Drafter IV

Prepares complete sets of complex drawings which include multiple views, detail drawings, and assembly drawings. Drawings include complex design features that require considerable drafting skill to visualize and portray. Assignments regularly require the use of mathematical formulas to compute weights, load capacities, dimensions, quantities of materials, etc. Working from sketches and verbal information supplied by an engineer or designer, determines the most appropriate views, detail drawings, and supplementary information needed to complete assignments. Selects required information from precedents, manufacturers' catalogs, and technical guides. Independently resolves most of the problems encountered. Supervisor or designer may suggest methods of approach or provide advice on unusually difficult problems.

NOTE: Exclude drafters performing work of similar difficulty to that described at this level but who provide support for a variety of organizations which have widely differing functions or requirements.

Drafter V

Works closely with design originators, preparing drawings of unusual, complex or original designs which require a high degree of precision. Performs unusually difficult assignments requiring considerable initiative, resourcefulness, and drafting expertise. Assures that anticipated problems in manufacture, assembly, installation, and operation are resolved by the drawings produced. Exercises independent judgment in selecting and interpreting data based on a knowledge of the design intent. Although working primarily as a drafter, may occasionally perform engineering design work in interpreting general designs prepared by others or in completing missing design details. May provide advice and guidance to lower level drafters or serve as coordinator and planner for large and complex drafting projects.

ELECTRONICS TECHNICIAN

(3711: Electrical and electronic engineering technologist and technician)

(615: Electrical and electronic equipment repairer)

Works on various types of electronic equipment and related devices by performing one or a combination of the following: Installing, maintaining, repairing, overhauling, troubleshooting, modifying, constructing, and testing. Work requires practical application of technical knowledge of electronics principles, ability to determine malfunctions, and skill to put equipment in required operating condition.

The equipment—consisting of either many different kinds of circuits or multiple repetition of the same kind of circuit—includes, but is not limited to, the following: (a) Electronic transmitting and receiving equipment (e.g., radar, radio, television, telephone, sonar, navigational aids), (b) digital and analog computers, and (c) industrial and medical measuring and controlling equipment.

This classification excludes repairers of such standard electronic equipment as common office machines and household radio and television sets; production assemblers and testers; workers whose primary duty is servicing electronic test instruments; technicians who have administrative or supervisory responsibility; and drafters, designers, and professional engineers.

Positions are classified into levels on the basis of the following definitions:

Electronics Technician I

Applies working technical knowledge to perform simple or routine tasks in working on electronic equipment, following detailed instructions which cover virtually all procedures. Work typically involves such tasks as: Assisting higher level technicians by performing such activities as replacing components, wiring circuits, and taking test

readings; repairing simple electronic equipment; and using tools and common test instruments (e.g., multimeters, audio signal generators, tube testers, oscilloscopes). Is not required to be familiar with the interrelationships of circuits. This knowledge, however, may be acquired through assignments designed to increase competence (including classroom training) so that worker can advance to higher level technician.

Receives technical guidance, as required, from supervisor or higher level technician. Work is typically spot-checked, but is given detailed review when new or advanced assignments are involved.

Electronics Technician II

Applies comprehensive technical knowledge to solve complex problems (i.e., those that typically *can* be solved solely by properly interpreting manufacturers' manuals or similar documents) in working on electronic equipment. Work involves: A familiarity with the interrelationships of circuits; and judgment in determining work sequence and in selecting tools and testing instruments, usually less complex than those used by the level III technician.

Receives technical guidance, as required, from supervisor or higher level technician, and work is reviewed for specific compliance with accepted practices and work assignments. May provide technical guidance to lower level technicians.

Electronics Technician III

Applies advanced technical knowledge to solve unusually complex problems (i.e., those that typically *cannot* be solved solely by reference to manufacturers' manuals or similar documents) in working on electronic equipment. Examples of such problems include location and density of circuitry, electromagnetic radiation, isolating malfunctions, and frequent engineering changes. Work involves: A detailed understanding of the interrelationships of circuits; exercising independent judgment in performing such tasks as making circuit analyses, calculating wave forms, tracing relationships in signal flow; and regularly using complex test instruments (e.g., dual trace oscilloscopes, Q-meters, deviation meters, pulse generators).

Work may be reviewed by supervisor (frequently an engineer or designer) for general compliance with accepted practices. May provide technical guidance to lower level technicians.

REGISTERED INDUSTRIAL NURSE

(29: Registered nurse)

A registered nurse gives nursing service under general medical direction to ill or injured employees or other persons who become ill or suffer an accident on the premises of a factory or other establishment. Duties involve *a combination of the following*: Giving first aid to the ill or injured; attending to subsequent dressing of employees' injuries; keeping records of patients treated; preparing accident reports for compensation or other purposes; assisting in physical examinations and health evaluations of applicants and employees; and planning and carrying out programs involving health education, accident prevention, evaluation of plant environment, or other activities affecting the health, welfare, and safety of all personnel. Nursing supervisors or head nurses in establishments employing more than one nurse are excluded.

Maintenance, Toolroom, and Powerplant

MAINTENANCE CARPENTER

(6422: Carpenter)

Performs the carpentry duties necessary to construct and maintain in good repair building woodwork and equipment such as bins, cribs, counters, benches, partitions, doors, floors, stairs, casings, and trim made of wood. Work involves *most of the following*: Planning and laying out of work from blueprints, drawings, models, or verbal instructions; using a variety of carpenter's handtools, portable power tools, and standard measuring instruments; making standard shop computations relating to dimensions of work; and selecting materials necessary for the work. In general, the work of the maintenance carpenter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE ELECTRICIAN

(615: Electrical and electronic equipment repairer)
(6432: Electrician)

Performs a variety of electrical trade functions such as the installation, maintenance, or repair of equipment for the generation, distribution, or utilization of electric energy. Work involves *most of the following*: Installing or repairing any of a variety of electrical equipment such as generators, transformers, switchboards, controllers, circuit breakers, motors, heating units, conduit systems, or other transmission equipment; working from blueprints, drawings, layouts, or other specifications; locating and diagnosing trouble in the electrical system or equipment; working standard computations relating to load requirements of wiring or electrical equipment; and using a variety of electrician's handtools and measuring and testing instruments. In general, the work of the maintenance electrician requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE PAINTER

(6442: Painter, construction and maintenance)

Paints and redecorates walls, woodwork, and fixtures. Work *involves the following*: Knowledge of surface peculiarities and types of paint required for different applications; preparing surface for painting by removing old finish or by placing putty or filler in nail holes and interstices; and applying paint with spray gun or brush. May mix colors, oils, white lead, and other paint ingredients to obtain proper color or consistency. In general, the work of the maintenance painter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE MACHINIST

(613: Industrial machinery repairer)

Produces replacement parts and new parts in making repairs of metal parts of mechanical equipment. Work involves *most of the following*: Interpreting written instructions and specifications; planning and laying out of work; using a variety of machinist's handtools and precision measuring instruments; setting up and operating standard machine tools; shaping of metal parts to close tolerances; making standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining; knowledge of the working properties of the common metals; selecting

standard materials, parts, and equipment required for this work; and fitting and assembling parts into mechanical equipment. In general, the machinist's work normally requires a rounded training in machine-shop practice usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE MECHANIC (MACHINERY)

(613: Industrial machinery repairer)

Repairs machinery or mechanical equipment. Work involves *most of the following*: Examining machines and mechanical equipment to diagnose source of trouble; dismantling or partly dismantling machines and performing repairs that mainly involve the use of handtools in scraping and fitting parts; replacing broken or defective parts with items obtained from stock; ordering the production of a replacement part by a machine shop or sending the machine to a machine shop for major repairs; preparing written specifications for major repairs or for the production of parts ordered from machine shops; reassembling machines; and making all necessary adjustments for operation. In general, the work of a machinery maintenance mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. Excluded from this classification are workers whose *primary duties* involve setting up or adjusting machines.

MAINTENANCE PIPEFITTER

(645: Plumber, pipefitter, and steamfitter)

Installs or repairs water, steam, gas, or other types of pipe and pipefittings. Work involves *most of the following*: Laying out work and measuring to locate position of pipe from drawings or other written specifications; cutting various sizes of pipe to correct lengths with chisel and hammer or oxyacetylene torch or pipe-cutting machines; threading pipe with stocks and dies; bending pipe by hand-driven or power-driven machines; assembling pipe with couplings and fastening pipe to hangers; making standard shop computations relating to pressures, flow, and size of pipe required; and making standard tests to determine whether finished pipes meet specifications. In general, the work of the maintenance pipefitter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. *Workers primarily engaged in installing and repairing building sanitation or heating systems are excluded.*

MILLWRIGHT

(6178: Millwright)

Installs new machines or heavy equipment, and dismantles and installs machines or heavy equipment when changes in plant layout are required. Work involves *most of the following*: Planning and laying out work; interpreting blueprints or other specifications; using a variety of handtools and rigging; making standard shop computations relating to stresses, strength of materials, and centers of gravity; aligning and balancing equipment; selecting standard tools, equipment, and parts to be used; and installing and maintaining in good order power transmission equipment such as drives and speed reducers. In general, the millwright's work normally requires a rounded training and experience in the trade acquired through a formal apprenticeship or equivalent training and experience.

MOTOR VEHICLE MECHANIC

(611: Vehicle and mobile equipment mechanic and repairer)

Repairs, rebuilds, or overhauls major assemblies of internal combustion automobiles, buses, trucks, or tractors. Work involves most of the following: Diagnosing the source of trouble and determining the extent of repairs required; replacing worn or broken parts such as piston rings, bearings, or other engine parts; grinding and adjusting valves; rebuilding carburetors; overhauling transmissions; and repairing fuel injection, lighting, and ignition systems. In general, the work of the motor vehicle mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

This classification does not include mechanics who repair customers' vehicles or who only perform minor repair and tuneup of motor vehicles. It does, however, include fully qualified journeymen mechanics even though most of their time may be spent on minor repairs and tuneups.

GENERAL MAINTENANCE WORKER

(6179: Mechanic and repairer, not elsewhere classified)

Performs general maintenance and repair of building structures and their mechanical, electrical, or sanitary systems. May also perform general maintenance and repair of machinery. Work requires a basic practical knowledge of several maintenance trades in order to perform most of the following: Keeping in good repair building woodwork; replacing electrical switches, fixtures, and motors; occasional painting or touching up of structure or equipment; repairing or replacing plumbing fixtures; and replacing broken window panes.

Excluded are positions requiring a formal apprenticeship or equivalent training in one or more crafts. Also excluded are workers participating in such a program.

MAINTENANCE TRADES HELPER

(863: Helper; mechanic and repairer)

(864: Helper; construction trades)

Assists one or more workers in the skilled maintenance trades by performing specific or general duties of lesser skill, such as keeping a worker supplied with materials and tools; cleaning working area, machine, and equipment; assisting journeyman by holding materials or tools; and performing other unskilled tasks as directed by journeyman. The kind of work the helper is permitted to perform varies from trade to trade: In some trades the helper is confined to supplying, lifting, and holding materials and tools, and cleaning working areas; and in others he is permitted to perform specialized machine operations, or parts of a trade that are also performed by workers on a full-time basis.

MACHINE-TOOL OPERATOR (TOOLROOM)

(6813: Machinist)

(731-2: Metalworking and plasticworking machine setup operator)

Specializes in operating one or more than one type of machine tool (e.g., jig borer, grinding machine, engine lathe, milling machine) to machine metal for use in making or maintaining jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal or nonmetallic material (e.g., plastic, plaster, rubber, glass). *Work typically involves*: Planning and performing difficult machining operations which require complicated setups or a high degree of accuracy; setting up machine tool or tools (e.g., install cutting tools and adjust guides, stops, working tables, and other controls to

handle the size of stock to be machined; determine proper feeds, speeds, tooling, and operation sequence or select those prescribed in drawings, blueprints, or layouts); using a variety of precision measuring instruments; making necessary adjustments during machining operation to achieve requisite dimensions to very close tolerances. May be required to select proper coolants and cutting and lubricating oils, to recognize when tools need dressing, and to dress tools. In general, the work of a machine-tool operator (toolroom) at the skill level called for in this classification requires extensive knowledge of machine-shop and toolroom practice usually acquired through considerable on-the-job training and experience.

For cross-industry wage study purposes, this classification does *not* include machine-tool operators (toolroom) employed in tool and die jobbing shops.

TOOL AND DIE MAKER

(6811: Tool and die maker)

Constructs and repairs jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal or nonmetallic material (e.g., plastic, plaster, rubber, glass). *Work typically involves*: Planning and laying out work according to models, blueprints, drawings, or other written or oral specifications; understanding the working properties of common metals and alloys; selecting appropriate materials, tools, and processes required to complete task; making necessary shop computations; setting up and operating various machine tools and related equipment; using various tool and die maker's handtools and precision measuring instruments; working to very close tolerances; heat-treating metal parts and finished tools and dies to achieve required qualities; fitting and assembling parts to prescribed tolerances and allowances. In general, the tool and die maker's work requires rounded training in machine-shop and toolroom practice usually acquired through formal apprenticeship or equivalent training and experience.

For cross-industry wage study purposes, this classification does *not* include tool and die makers who (1) are employed in tool and die jobbing shops or (2) produce forging dies (die sinkers).

STATIONARY ENGINEER

(6931: Stationary engineer)

Operates and maintains one or more systems such as heat, air-conditioning (cool, humidify, dehumidify, filter, and circulate air), refrigeration, steam or high-temperature water, or electricity. Duties involve: Observing and interpreting readings on gauges, meters, and charts which register various aspects of the system's operation; adjusting controls to insure safe and efficient operation of the system and to meet demands for the service provided; recording in logs various aspects of the system's operation; keeping the engines, machinery, and equipment of the system in good working order. May direct and coordinate activities of other workers (not stationary engineers) in performing tasks directly related to operating and maintaining the system or systems.

The classification excludes head or chief engineers in establishments employing more than one engineer; workers required to be skilled in the repair of electronic control equipment; workers in establishments producing electricity, steam, or heated or cooled air primarily for sale; and boiler tenders.

Material Movement and Custodial

TRUCKDRIVER

(821: Motor vehicle operator)

Drives a truck within a city or industrial area to transport materials, merchandise, equipment, or workers between various types of establishments such as: Manufacturing plants, freight depots, warehouses, wholesale and retail establishments, or between retail establishments and customers' houses or places of business. May also load or unload truck with or without helpers, make minor mechanical repairs, and keep truck in good working order. *Salesroute and over-the-road drivers are excluded.*

For wage study purposes, truckdrivers are classified by type and rated capacity of truck, as follows:

Truckdriver, light truck
(straight truck, under 1 1/2 tons, usually 4 wheels)
Truckdriver, medium truck
(straight truck, 1 1/2 to 4 tons inclusive, usually 6 wheels)
Truckdriver, heavy truck
(straight truck, over 4 tons, usually 10 wheels)
Truckdriver, tractor-trailer

SHIPPER AND RECEIVER

(4753: Traffic, shipping and receiving clerk)

Performs *clerical and physical* tasks in connection with shipping goods of the establishment in which employed and receiving incoming shipments. In performing day-to-day, routine tasks, follows established guidelines. In handling unusual nonroutine problems, receives specific guidance from supervisor or other officials. May direct and coordinate the activities of other workers engaged in handling goods to be shipped or being received.

Shippers typically are responsible for most of the following: Verifying that orders are accurately filled by comparing items and quantities of goods gathered for shipment against documents; insuring that shipments are properly packaged, identified with shipping information, and loaded into transporting vehicles; preparing and keeping records of goods shipped, e.g., manifests, bills of lading.

Receivers typically are responsible for most of the following: Verifying the correctness of incoming shipments by comparing items and quantities unloaded against bills of lading, invoices, manifests, storage receipts, or other records; checking for damaged goods; insuring that goods are appropriately identified for routing to departments within the establishment; preparing and keeping records of goods received.

For wage study purposes, workers are classified as follows:

Shipper
Receiver
Shipper and receiver

WAREHOUSEMAN

(4754: Stock and inventory clerk)

As directed, performs a *variety* of *warehousing* duties which require an *understanding of the establishment's storage plan*. Work involves *most of the following*: Verifying materials (or merchandise) against receiving documents, noting and reporting discrepancies and obvious damages; routing materials to prescribed storage locations; storing,

stacking, or palletizing materials in accordance with prescribed storage methods; rearranging and taking inventory of stored materials; examining stored materials and reporting deterioration and damage; removing material from storage and preparing it for shipment. May operate hand or power trucks in performing warehousing duties.

Excludes workers whose *primary* duties involve shipping and receiving work (see Shipper and receiver and Shipping packer), order filling (see Order filler), or operating power trucks (see Power-truck operator).

ORDER FILLER

(4754: Stock and inventory clerk)

Fills shipping or transfer orders for finished goods from stored merchandise in accordance with specifications on sales slips, customers' orders, or other instructions. May, in addition to filling orders and indicating items filled or omitted, keep records of outgoing orders, requisition additional stock or report short supplies to supervisor, and perform other related duties.

SHIPPING PACKER

(8761: Hand packer and packager)

Prepares finished products for shipment or storage by placing them in shipping containers, the specific operations performed being dependent upon the type, size, and number of units to be packed, the type of container employed, and method of shipment. Work requires the placing of items in shipping containers and *may involve one or more of the following*: Knowledge of various items of stock in order to verify content; selection of appropriate type and size of container; inserting enclosures in container; using excelsior or other material to prevent breakage or damage; closing and sealing container; and applying labels or entering identifying data on container. *Packers who also make wooden boxes or crates are excluded.*

MATERIAL HANDLING LABORER

(8726: Freight, stock, and material mover, not elsewhere classified)

Performs physical tasks to transport or store materials or merchandise. Duties involve *one or more of the following:* Manually loading or unloading freight cars, trucks, or other transporting devices; unpacking, shelving, or placing items in proper storage locations; or transporting goods by handtruck, cart, or wheelbarrow.

Excluded from this definition are workers whose primary function involves:

a. Participating directly in the production of goods (e.g., moving items from one production station to another or placing them on or removing them from the production process);
b. Stocking merchandise for sale;
c. Counting or routing merchandise;
d. Operating a crane or heavy-duty motorized vehicle such as forklift or truck;
e. Loading and unloading ships (longshore workers); or
f. Traveling on trucks beyond the establishment's physical location to load or unload merchandise.

POWER-TRUCK OPERATOR

(8318: Industrial truck and tractor equipment operator)

Operates a manually controlled gasoline- or electric-powered truck or tractor to transport goods and materials of all kinds about a warehouse, manufacturing plant, or other establishment.

For wage study purposes, workers are classified by type of powertruck, as follows:

Forklift operator
Power-truck operator (other than forklift)

GUARD

(5144: Guard and police, except public service)

Protects property from theft or damage, or persons from hazards or interference. Duties involve serving at a fixed post, making rounds on foot or by motor vehicle, or escorting persons or property. May be deputized to make arrests. May also help visitors and customers by answering questions and giving directions.

Guards employed by establishments which provide protective services on a contract basis are included in this occupation.

For wage study purposes, guards are classified as follows:

Guard I

Carries out instructions primarily oriented toward insuring that emergencies and security violations are readily discovered and reported to appropriate authority. Intervenes directly only in situations which require minimal action to safeguard property or persons. Duties require minimal training. Commonly, the guard is not required to demonstrate physical fitness. May be armed, but generally is not required to demonstrate proficiency in the use of firearms or special weapons.

Guard II

Enforces regulations designed to prevent breaches of security. Exercises judgment and uses discretion in dealing with emergencies and security violations encountered. Determines whether first response should be to intervene directly (asking for assistance when deemed necessary and time allows), to keep situation under surveillance, or to report situation so that it can be handled by appropriate authority. Duties require specialized training in methods and techniques of protecting security areas. Commonly, the guard is required to demonstrate continuing physical fitness and proficiency with firearms or other special weapons.

JANITOR, PORTER, OR CLEANER

(5244: Janitor and cleaner)

Cleans and keeps in an orderly condition factory working areas and washrooms, or premises of an office, apartment house, or commercial or other establishment. Duties involve *a combination of the following*: Sweeping, mopping or scrubbing, and polishing floors; removing chips, trash, and other refuse; dusting equipment, furniture, or fixtures; polishing metal fixtures or trimmings; providing supplies and minor maintenance services; and cleaning lavatories, showers, and restrooms. *Workers who specialize in window washing are excluded.*

Area Wage Survey Summaries

The following areas are surveyed periodically under contract to the Employment Standards Administration of the U.S. Department of Labor for its use in administering the Service Contract Act of 1965. Reports on the surveys shown below are available at no cost from any of the Bureau's regional offices while supplies last.

Alaska (statewide)
Albany, GA
Albany-Schenectady-Troy, NY
Albuquerque, NM
Alexandria-Leesville, LA
Alpena-Standish-Tawas City, MI
Ann Arbor, MI
Asheville, NC
Atlantic City, NJ
Augusta, GA-SC
Austin, TX[1]
Bakersfield, CA
Baton Rouge, LA
Battle Creek, MI
Beaumont-Port Arthur and Lake Charles, TX-LA
Biloxi-Gulfport and Pascagoula-Moss Point, MS
Binghamton, NY
Birmingham, AL
Bloomington-Vincennes, IN
Bremerton-Shelton, WA
Brunswick, GA
Cedar Rapids, IA
Champaign-Urbana-Rantoul, IL[1]
Charleston, SC[1]
Chattanooga, TN-GA
Cheyenne, WY
Clarksville-Hopkinsville, TN-KY
Colorado Springs, CO
Columbia-Sumter, SC
Columbus, GA-AL
Columbus, MS
Connecticut (statewide)
Dayton-Springfield, OH
Daytona Beach, FL
Decatur, IL[1]
Des Moines, IA
Dothan, AL
Duluth, MN-WI
El Paso-Las Cruces-Alamogordo, TX-NM
Eugene-Springfield-Medford-Roseburg-Klamath Falls-Grants Pass, OR
Fayetteville, NC
Fort Lauderdale-Hollywood-Pompano Beach and West Palm Beach-Boca Raton-Delray Beach, FL
Fort Smith, AR-OK
Fort Wayne, IN
Gadsden and Anniston, AL
Goldsboro, NC
Grand Island-Hastings, NE
Green Bay, WI[2]
Greensboro-Winston-Salem-High Point, NC[2]
Greenville-Spartanburg, SC
Harrisburg-Lebanon-Carlisle, PA
Jacksonville, FL
Knoxville, TN
LaCrosse-Sparta, WI
Laredo, TX
Las Vegas-Tonopah, NV
Lexington-Fayette, KY
Lima, OH
Little Rock-North Little Rock, AR
Logansport-Peru, IN
Lorain-Elyria, OH
Lower Eastern Shore, MD-VA-DE
Macon, GA
Madison, WI
Maine (statewide)
Manhattan-Junction City, KS
Mansfield, OH
McAllen-Edinburg-Mission and Brownsville-Harlingen, TX
Melbourne-Titusville-Palm Bay, FL
Meridian, MS
Montana (statewide)
Montgomery, AL
Nashville, TN
New Bern-Jacksonville, NC
New Hampshire (statewide)
Norfolk-Virginia Beach-Newport News, VA
North Dakota (statewide)
Northern New York
Northwest Texas
Northwestern Florida
Oklahoma City, OK
Orlando, FL[1]
Oxnard-Ventura, CA
Peoria, IL
Pine Bluff, AR
Portsmouth-Chillicothe-Gallipolis, OH
Poughkeepsie-Orange County-Kingston, NY
Providence, RI
Pueblo, CO
Puerto Rico
Raleigh-Durham, NC
Reno, NV
Riverside-San Bernardino, CA[1]
Salina, KS
Salinas-Seaside-Monterey, CA
Sandusky, OH
Santa Barbara-Santa Maria-Lompoc, CA
Savannah, GA
Selma, AL
Sherman-Denison, TX
Southeastern Massachusetts
South Dakota (statewide)
Southwest Virginia
Spokane, WA
Springfield, IL
Stockton, CA
Tacoma, WA
Topeka, KS
Tucson-Douglas, AZ
Tulsa, OK
Upper Peninsula, MI
Vallejo-Fairfield-Napa, CA
Vermont (statewide)
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Waco and Killeen-Temple, TX
Waterloo-Cedar Falls, IA
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ALSO AVAILABLE—

An annual report on salaries for such jobs as accountants, auditors, public accountants, chief accountants, attorneys, programmers and systems analysts, job analysts, directors of personnel, buyers, chemists, engineers, engineering technicians, drafters, computer operators, and clerical employees is available. Order as BLS Bulletin 2317, *National Survey of Professional, Administrative, Technical, and Clerical Pay: Private Nonservice Industries, March 1988* (Price $5), from: Bureau of Labor Statistics, Publications Sales Center, P.O. Box 2145, Chicago, IL 60690, or Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

[1] In 1988, this area is scheduled to be surveyed under the Bureau's regular area wage survey program. See inside back cover.

[2] Scheduled to be surveyed in this program for the first time in 1988. In 1986, the area was surveyed under the Bureau's regular area wage survey program. See inside back cover.

Employee Benefits in State and Local Governments, 1987

U.S. Department of Labor
Bureau of Labor Statistics
Bulletin 2309

The Bureau of Labor Statistics issues its first bulletin on employee benefits in State and local goverments.

Data available

- Incidence and detailed characteristics of 14 employee benefits paid for at least in part by employer: Lunch and rest periods, holidays, vacations, and personal, funeral, jury-duty, military, and sick leave, sickness and accident, long-term disability, health, and life insurance, and retirement/capital accumulation plans. Retirement data include defined benefit plans and defined contribution plans, such as savings and thrift plans with salary reduction arrangements permitted under the Internal Revenue Code.
- Incidence and provisions of flexible benefits plans, reimbursement accounts, and unpaid maternity and paternity leave.
- Incidence data on 16 other benefits, including educational assistance, nonproduction bonuses, subsidized child care, and sabbatical leave.
- Data are presented separately for three occupational groups—teachers, police officers and firefighers, and regular employees.

Coverage

- Major benefits in State and local government establishments of the United States, except Alaska and Hawaii.
- Local governments with at least 50 employees, and the entire State government for States.

Source of data

- Sample of about 869 government units, including 24 States and 845 local government establishments; primarily by personal interview.

*U.S. Government Printing Office: 1989-241-386/80239

Uses

- Benefit administration in public and private employment.
- Union contract negotiations.
- Conciliation and arbitration in public and private sectors.
- Development of legislation affecting the welfare of workers.

Also available

- The 1986 survey of employee benefits in medium and large firms.

Order Form

Publications are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, or from BLS Publications Sales Center, P.O. Box 2145, Chicago, IL 60690.

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